Construction News

★Denotes work advertised in ENGINEERING NEWS.
✚Denotes contract awarded. The names of bidders awarded contracts are set in CAPITALS.

RAILWAYS

West Virginia—Horse Creek Land & Mining Co.—The construction of a railway in the Duvall District, Lincoln County, W. Va., is contemplated by this company. L. E. Poteet, Charleston, W. Va., is Gen. Mgr. and Romine & Snyder are Engrs.

✚**Michigan**—Battle Creek-Coldwater R.R.—This company has awarded a contract to JOHN T. ADAMS, Columbus, Ohio, for constructing its line from Battle Creek, Mich., to Coldwater, Mich.

Montana—The construction of a railway from Bozeman, Mont., to Yellowstone, Mont., is contemplated. E. W. Dawes, Bozeman, is interested.

Great Northern Ry.—It is reported that this company plans the extension for a distance of several miles of its line from Gilman to Augusta, Mont. It is stated work will start within 30 days.

✚**Arkansas**—The A. L. Clark Lumber Co., Arkadelphia, Ark., has awarded the contract for the construction of a logging road in Pike County, Ark., to J. N. GEORGE & SONS.

Texas—Gulf, Freeport & Northern R.R.—This company is making preliminary arrangements for the extension of its railway from Freeport to Rosenburg, Tex. C. L. Sharp, Freeport, Tex., is Gen. Mgr. Noted Sept. 3.

Quanah, Acme & Pacific R.R.—This company has completed surveys for the construction of a railway from Roaring Springs, Tex., to Roswell, N. M., about 200 miles. Robert Gray, Quanah, Tex., is Gen. Mgr. Noted Sept. 24.

Arizona—The Gunn-Thompson Co. will construct a railway from its mine at Superior, Ariz., to a connection with the Phœnix & Eastern R.R. at Webster, Ariz., about 20 miles.

Oregon—Devereaux & Tripp, Eugene, Ore., have charge of the construction of a logging railway to be constructed up Lost Creek from Natron extension, through Dexter, into timber land. The road has been surveyed and construction will begin soon.

The County Court of Lane County, Eugene, Ore., has granted permission to the Jowler Lumber Co. to construct a logging railway across the county road, to connect with its timber properties.

California—California Terminal Ry.—Plans are being prepared by this company for the construction of a railway from San Rafael, Calif., to Sacramento, Calif. The line will pass through Marin, Sonoma, Napa, Solano, Yolo and Sacramento Counties.

ELECTRIC RAILWAYS

Haverhill, Mass.—Arrangements are being made by the Bay State St. Ry. Co. for the reconstruction of its line on River St. in Haverhill. A. P. Emmons, Boston, is Pur. Agt.

New Bedford, Mass.—The Union St. Ry. Co. has applied to the City Council for a franchise to extend several of its lines in New Bedford. Elton S. Wilde, New Bedford, is Vice-Pres., Gen. Supt. and Pur. Agt.

Westfield, Mass.—The Springfield St. Ry Co. has been granted a franchise to double track its line along the state highway in Westfield. R. W. Reynolds, Springfield, is Mgr.

Niagara Falls, N. Y.—The Niagara River & Eastern R.R. Co. has been incorporated to construct an electric railway from the terminal of the Buffalo, Lockport & Rochester Ry. in Buffalo to Niagara Falls. The incorporators are E. G. Connette, Frank A. Dudley, A. J. Porter and A. W. Gray, all of Niagara Falls.

Washington, D. C.—The Washington Ry. & Electric Co. is considering plans for the extension of its line from 14th and B St., southwest, to the Bureau of Printing and Engraving. R. W. Crowell, 213 14th St., N. W., Washington, is Pur. Agt.

Athens, W. Va.—The Mercer Electric Ry. Co. is making preliminary arrangements for the construction of an electric railway from Athens to Princeton, about seven miles. R. G. Meador, Athens, is Pres.

Weston, W. Va.—Preliminary plans are being considered by the Weston & Glenville Electric Ry. Co. for the construction of an electric railway from Weston to Glenville, about 25 miles. Lloyd Rinehart, Weston, is interested.

Spartanburg, S. C.—The Piedmont & Northern Ry. Co. is preparing to extend its electric interurban line from Spartanburg to Gastonia, about 32 miles.

Jacksonville, Fla.—The Jacksonville Traction Co. is preparing plans for the extension of several of its lines in Jacksonville. Hardy Croom, Jacksonville, is Local Mgr. and Pur. Agt.

Marion, Ill.—The Board of Supervisors of Williamson County has granted a franchise to the Southern Illinois Ry. & Power Co. to construct and operate an electric railway from Marion to Carrier Mills. W. H. Scott, Chicago, is Vice-Pres., Gen. Mgr. and Pur. Agt.

Peoria, Ill.—According to press reports surveys are being made by W. H. Schott Co., Engrs., 111 Monroe St., Chicago, Ill., for the construction of an electric interurban line from Peoria to Washington.

Hutchinson, Kan.—The Arkansas Valley Interurban Ry. Co. and the Hutchinson St. Ry. Co. have entered into an agreement under which the lines of both companies will be connected. This will require the extension of the Arkansas Valley line for a distance of about two miles.

St. Louis, Mo.—The United Rys. Co. is considering plans for the extension of its line on Union Ave. to the city limits. Richard McCulloch, St. Louis, is Vice-Pres. and Gen. Mgr.

Hot Springs, Ark.—Preliminary arrangements are being made by the Hot Springs St. Ry Co. for the extension of its line on Malvern Ave. to the Country Club. S. E. Dillon, Hot Springs, is Gen. Mgr.

✚**Dallas, Tex.**—The contract for the construction of a street railway from the downtown section of Dallas to the campus of the Southern Methodist University has been awarded by the Board of Trustees of the institution to the STONE & WEBSTER ENGINEERING CORPORATION, Boston, Mass. Noted June 18 and July 2.

Mexia, Tex.—The Commercial Club is interested in the construction of an electric railway in Mexia.

Ardmore, Okla.—Preliminary arrangements are being made by the Ardmore & Western Interurban Ry. Co. for the construction of an electric railway from Ardmore to Oil City.

Lewiston, Idaho—An electric railway will be constructed from Lewiston to Clarkston by R. C. Dahlhjelm, St. Paul, Minn., who has taken over the Lewiston Terminal Co.

Fresno, Calif.—The City Council has granted a franchise to the Fresno Traction Co. for the construction of an electric railway on South J St. and Fresno Ave. Frank W. Webster, Fresno, is Gen. Mgr.

Long Beach, Calif.—The Pacific Electric Ry. Co. has applied to the City Council for a franchise to construct and operate an electric railway in Long Beach. J. McMillan, Los Angeles, is Gen. Mgr.

Sausalito, Calif.—The Sausalito Incline Ry. Co. has been granted permission to construct an incline railway in Sausalito. Allen H. Vance, Sausalito, is interested.

Turlock, Calif.—F. P. Will, Burlingame, Calif., plans to build a trackless trolley system from Turlock to Denair, about four miles. The system will cost approximately $20,000.

Cornwall, Ont.—The Cornwall St. Ry. Co. has been granted a franchise to extend its lines and build loop lines on Cumberland and Water St. William Hodge, Cornwall, is Gen. Mgr. and Pur. Agt.

Sarnia, Ont.—The Sarnia St. Ry. Co. has been granted permission to reconstruct its line on Christina St. George E. Wadland, Sarnia, is Gen. Mgr. and Pur. Agt.

LIGHT, HEAT AND POWER

West Springfield, Mass.—Bids will soon be asked by the Ramapogue Ice Co. for the construction of a dam in the Westfield River. Bliss & Lavalle, Springfield, Mass., have charge of engineering. Noted July 23 and Aug. 6.

New Britain, Conn.—The Board of Education contemplates the installation of a heating plant for the central group of school buildings. Walter P. Crabtree, 272 Main St., will have charge of the work.

✚**Waterbury, Conn.**—The George A. Fuller Co., New York, N. Y., general contractors for the new municipal building at Grand and Field St., has awarded a sub-contract for the heating, ventilating and plumbing equipment to the BARLOW BROS. CO., 63 Grand St., Waterbury, at about $75,000.

★**Hudson, N. Y.**—Bids will be received, until 2 p.m., Oct. 23, by (Miss) Mary Hinckley, Pres., Bd. of Mgr., New York Training School for Girls, for heating, plumbing, electric work and electric elevator in the hospital building, refrigerating plant and equipment, heating, plumbing and electric work in the contagious hospital of the New York State School. Lewis F. Pilcher, Capitol, Albany, is State Arch.

★**Ithaca, N. Y.**—(Official)—Bids will be received, until 2 p.m., Oct. 31, by E. L. Williams, Treas., Cornell University, for underground steam piping, conduits, pumps, etc., in connection with the central heating plant for the New York State College of Agriculture, Cornell University, Ithaca, N. Y. Green & Wicks, 110 Franklin St., Buffalo, N. Y., are Archs.

Newburgh, N. Y.—The Central Hudson Gas & Electric Co. has applied to the City Council for permission to lay a conduit system from its power station in Montgomery St. to its substation in Balmville. The estimated cost of the work is $50,000.

★**Butler, N. J.**—All bids received by the Borough Council for the construction of a municipal electric light plant were rejected as being above the appropriation of $30,000. The plans will be revised and new bids will be asked. George J. Fritz is Borough Clk. Noted Aug. 27.

Irvington, N. J.—The Town Council has retained Runyon & Carey, Consult. Engrs., Newark, N. J., to prepare plans and estimates for the installation of a municipal electric light plant. Isaac J. Casey is City Engr.

Paterson, N. J.—The Board of Public Works is considering plans for the installation of a municipal distributing system for city lighting and other purposes. The power will be secured from the Public Service Electric Co. H. J. Harder is City Engr.

†Philadelphia, Penn.—The A. Schoenhut Co., manufacturer of toys, has awarded the contract for the construction of a one-story brick and reinforced-concrete power house and garage at Boston Ave. and York St., to FRED A. HAVENS & CO., 817 North 19th St., Philadelphia. Noted Sept. 24.

Orangeburg, S. C.—The City Council contemplates improvements to the municipal electric light plant at an estimated cost of $10,000. Additional boilers will be installed. L. H. Wannamaker is Mgr. of the plant.

Lakeland, Fla.—At a special election held Oct. 6, the citizens voted in favor of a bond issue of $130,000, the proceeds of which will be used to enlarge the electric light plant and water works system, and extend the distribution lines.

Jackson, Miss.—The City Engineer has prepared two sets of plans for a municipal light and power plant. The first plan, calling for the location of the plant in the city, will cost about $165,000. The other plan, locating the power house at the pumping station of the water-works system, will cost $155,000. Both plans include an estimate of $29,000 for underground wiring in the business section of the city. A special election will be called to vote on the question of a bond issue for the construction of the plant. M. L. Culley is City Engr. Noted Oct. 8.

Bunkie, La.—The Bunkie Ice Co. has been granted a franchise to light the city, and will at once install a power plant for that purpose. W. L. Thompson, Boyce, La., is Superv. Engr.

Gretna, La.—The City Council is considering the establishment of a municipal electric light plant at a cost of about $30,000.

Pebble, Ky.—At a recent election, the citizens voted in favor of establishing a municipal electric light plant.

Cleveland, Ohio—The lowest bid received by the city for the construction of a new power house for the Cleveland City Hospital was that of Metzger & Wells, Heed Bldg., Philadelphia, Penn., at about $90,000. Noted July 16.

Wellsville, Ohio—The Supreme Court of Ohio has authorized the City to proceed with the construction of a municipal electric light plant. This settles the suit to enjoin Wellsville from bonding the city for $60,000 for the construction of the plant.

Atwood, Ill.—At a special election held Oct. 3, the question of issuing bonds for constructing a municipal electric lighting system was carried.

Ceylon, Minn.—The Village Council is receiving bids for the construction of a municipal electric-light plant, estimated to cost $8000. The building will be of concrete block, one story, 25x50 ft. Earle D. Jackson, Capital Bank Bldg., St. Paul, Minn., is Engr.-in-Charge. Noted Aug. 13.

St. Paul, Minn.—A permit has been issued by the city building department for the construction of a power house for the new Catholic Cathedral at Salby and Farrington Ave. The building will be of brick and concrete, and will cost about $15,000.

Maxwell, Neb.—The Village Board has retained the Alamo Engine & Supply Co., Omaha, Neb., to prepare plans for a municipal electric light plant, to cost approximately $36,500. The question of a bond issue for its construction will be submitted to the voters.

Cuero, Tex.—The Cuero Commercial Club, G. H. Harris, Secy., and other citizens, are promoting the installation of a gas generating plant and distribution system for Cuero.

Port Lavaca, Tex.—The Citizens' Light & Water Co., recently incorporated, is considering the establishment of an electric power plant.

†San Antonio, Tex.—The Commissioners Court of Bexar County has awarded the contract for a new heating plant in the County Court House to WILLIAM G. SCHWIRTH, at $10,300, and a contract for electric wiring in the building to MARTIN WRIGHT, at $2288.

Tishomingo, Okla.—It is reported that F. A. Gillespie, Tulsa, Okla., has bought a power site of 90 acres on the Blue River, and will develop about 1500 hp.

Victor, Idaho—A special election will be held, Oct. 24, to vote on the question of a bond issue for the purpose of building a municipal electric light and power plant. The estimated cost is $8000. M. H. Brinton is City Clk.

Tonopah, Nev.—The Nevada-California Power Co. will extend its transmission line from Tonopah to Manhattan, a distance of 14 miles. G. M. Wills, Goldfield, Nev., is Dist. Mgr.

Winnemucca, Nev.—W. J. Compton and Frank L. Reber contemplate building a gas plant and installing a distributing system.

Olympia, Wash.—The Crescent Oil Co. will install a gas distributing system in Olympia.

Winlock, Wash.—The Independent Electric Co., a subsidiary of the Washington-Oregon Corporation, Vancouver, Wash., will build a transmission line from Winlock to Toledo. S. L. Adams, Vancouver, is Supt. of the Washington-Oregon Corp.

Azusa, Calif.—It is reported that a special election will soon be held to vote on the question of a bond issue of $20,000, the proceeds of which will be used for the construction of a municipal electric light plant.

†Bakersfield, Calif.—The Board of Supervisors of Kern County has awarded the contract for the construction of a nine-mile transmission line for supplying power to the crushing plant of the County Highway to the POWER EQUIPMENT CO., Rialto Bldg., San Francisco, at $11,000.

Santa Maria, Calif.—The Midland Counties Gas & Electric Co., Santa Maria, will build a transmission line from Santa Maria to Lompoc. It will cost about $15,000. A. G. Wishon, Fresno, Calif., is Gen. Mgr.

Woodland, Calif.—The Pacific Gas & Electric Co., San Francisco, will improve its gas service in Woodland at an estimated cost of $40,000. W. E. Osborn, Woodland, is Dist. Mgr.

Juneau, Alaska—E. P. Kennedy and J. W. Beckman are interested in the construction of a hydro-electric power plant on the Speel River, about 35 mles south of Juneau. Noted Sept. 24.

Chatham, Ont.—The City Council has passed a by-law authorizing the equipment of a new hydro-electric plant, estimated to cost $150,000. An engineer will be engaged, and the plans prepared as soon as possible.

Stettler, Alta.—See item under "Water Supply and Irrigation."

BRIDGES

†Boston, Mass.—(Official)—The Metropolitan Park Commission has awarded the contract for the superstructure of the Wellington Bridge at Somerville and Medford to COLEMAN BROS., Boston, at $44,013. Other bidders were: Michael D. Russo, Boston, $76,287; W. H. Ellis & Son Co., East Boston, $63,936; H. P. Converse, Boston, $61,000; Charles Essena & Co., Boston, $60,346; W. A. Murtfeldt Co., Boston, $57,930; Rendle & Stoddard, East Boston, $57,884; Hugh Nawn Contracting Co., Roxbury, $53,374; W. A. & H. A. Root, Inc., Boston, $52,745; William M. Bailey, Boston, $51,515; T. Stuart Son Co., Boston, $49,960. Noted Oct. 15.

†Dedham, Mass.—(Official)—The Commissioners of Norfolk County have awarded the contract for the construction of a concrete beam bridge between Norwood and Canton, to R. L. WHIPPLE & CO., 306 Main St., Worcester, Mass., at $8837. Other bidders were: Hyde Park Construction Co., $9168; Moore & Co., $9750; Hancock Engineering Co., $11,804; Walter Smith & Son, $15,036; Thomas E. Ruggles Co., $17,000. Noted Oct. 1.

Bristol, Conn.—The Common Council has authorized Carleton W. Buell, City Engr., to prepare plans for a concrete bridge on Pond St.

Old Lyme, Conn.—Bids are being received by Charles J. Bennett, State Highway Comr., Capitol, Hartford, for the construction of an 80-ft. bridge, including abutments and approaches, at Old Lyme. It will be of the steel arch girder type.

Glens Falls, N. Y.—The Town Board, according to press reports, has engaged the Concrete-Steel Engineering Co., New York, N. Y., to prepare plans for a bridge over the east channel of the Hudson River at Glens Falls. Bids for its construction will probably not be asked before the late winter or early spring.

New York, N. Y.—(Borough of Bronx)—(Official)—The following bids were received Oct. 8 for repairing, cleaning and painting the bridge over the tracks of the New York, New Haven & Hartford R.R., at East 153d St.: Jopson Gifford Co., $33,275; the Marble Arch Co., Kingsbridge Road and Jerome Ave., New York, $33,300; the Snare & Triest Co., Woolworth Bldg., New York, $34,630; Neptune B. Smythe, Inc., 413 East 34th St., New York, $33,630. Noted Oct. 1.

†Camden, N. J.—(Official)—The Board of Chosen Freeholders of Camden County has awarded the contract for furnishing the material for the Broadway Bridge over Newton Creek to the KELLY-McFEELY CO., Camden, at $14,150. The bid of the Owego Bridge Co., Owego, N. Y., was $16,074. J. J. Albertson is County Engr. Noted Oct. 8.

Dover, N. J.—(Official)—Bids will be received until 5 p.m., Oct. 31, by the Bridge Committee of Morris County, at the Mansion House, Dover, for masonry and placing steel beams and concrete arches for the bridge known as the Bryant Bridge, on the road from Succasunna to Ironia, Randolph Township, Morris County. William A. Kinney, John A. Bermingham and Leonard Elliott form the Bridge Com.

Kingston, N. J.—It is reported that the Boards of Chosen Freeholders of Somerset, Mercer and Middlesex Counties and the Pennsylvania R.R., contemplate the construction of a new bridge over the Raritan Canal at Kingston.

†New Brunswick, N. J.—The Board of Chosen Freeholders of Middlesex County has awarded the contract for the construction of a bridge on the Perth Amboy-Metuchen Road to JOSEPH McEWEN, JR.

†Marcus Hook, Penn.—The Commissioners of Delaware County, Media, have awarded the contract for a bridge at Marcus Hook to ERNEST PALMER, Wallingford, Penn., at about $4000.

Louisa, Va.—(Official)—Bids will be received until noon, Oct. 28, by the Clerk of the Circuit Court of Louisa County, for the construction of a 75-ft. bridge, with a 12-ft. roadway, over the Little River. The superstructure will be of steel with a concrete substructure.

Princeton, W. Va.—See item under "Streets and Roads."

Fayetteville, N. C.—(Official)—The Commissioners of Cumberland County awarded no contracts from bids received Oct. 12 for the construction of a number of concrete bridges in the county, estimated to cost from $25,000 to $30,000, and the matter has been deferred for a time. Fulton R. Hall is Clk. of Comrs. Noted Oct. 1.

Fort Lauderdale, Fla.—Bids will be received, until Nov. 3, by the Commissioners of Dade County, Miami, for a steel drawbridge, approaches and abutments, over the New River at Fort Lauderdale. The successful contractor is also to provide a temporary bridge for use while the new structure is being built. Z. T. Merritt is Clk. of the County Comrs. Noted July 23 and Aug. 20.

Jackson, Miss.—The Board of Supervisors of Hinds County, Jackson, and the Board of Supervisors of Warren County, Vicksburg, will soon open bids for the construction of a reinforced-concrete bridge over the Big Black River. The estimated cost of the structure is $18,000, of which each county will pay half. W. W. Downing is Chancery Clk. of Hinds County.

Pittsboro, Miss.—Bids will be received, until Nov. 2, by the Highway Commissioners of Supervisors District No. 1, of Calhoun County, for the construction of culverts on the road from Pittsboro to the western boundary of the district, the road from Big Creek to the western boundary, and the

extension of the road from Pittsboro to the northern boundary of the district. A. A. Bruner is a Comr.

Nashville, Tenn.—The City Council plans to build a reinforced-concrete viaduct over the tracks of the Nashville, Chattanooga & St. Louis Ry. at Cedar St. The estimated cost of the viaduct is $45,000, and it is proposed that the city, the railway and the Nashville Ry. & Light Co. share equally in the cost. W. W. Southgate is City Engr.

Rogersville, Tenn.—The Commissioners of Hawkins County have appropriated $18,000 for the construction of a bridge at Durem.

Elizabethtown, Ky.—The Fiscal Courts of Hardin and Grayson Counties plan to build a reinforced-concrete bridge at Hughes Mill. W. C. Montgomery, Elizabethtown, is Judge of Hardin County.

Cincinnati, Ohio—The Board of Park Commissioners and the City Engineer are preparing plans for a new concrete bridge to replace the present one at the Park Ave. entrance to Eden Park. Philip Fosdick is Dir. of Pub. Ser.

Marietta, Ohio—Bids will be received until noon, Oct. 23, by the Board of Commissioners of Washington County for the construction of the superstructure of the Big Run Bridge, Adams Township. W. B. Alexander is County Audr.

Painesville, Ohio—Bids will be received until noon, Nov. 2, by the Commissioners of Washington County, for the construction of a steel bridge over the east branch of the Chagrin River, Kentland Township. W. A. Davis is County Audr.

Toledo, Ohio—(Official)—Bids will be received until 10 a.m., Nov. 13, by the Board of Supervisors of Lucas County, for the construction of the substructure and superstructure of a bridge on Detroit Ave. over the Miami and Erie Canal, Washington Township; new abutment and floor for a bridge on Road No. 455 over Shantee Creek, Washington Township; new abutments and floor for the bridge on Road No. 455 over Silver Creek, Washington Township, and the south abutment to bridge on Key St., over the Miami and Erie Canal, Maumee. Charles J. Sanzenbacher is County Audr.

†West Carrollton, Ohio—(Official)—The Board of Commissioners of Montgomery County has awarded the contract for the superstructure of a bridge over the canal at Cedar St., West Carrollton, to the BROOKVILLE BRIDGE CO., Brookville, Ohio. Noted Oct. 1.

Ecorse, Mich.—At a special election held Oct. 13, the voters defeated a bond issue of $35,000 for the purpose of building a lift bridge over Ecorse Creek at West Jefferson Ave. The present bridge has been condemned, however, so the Township Board has been petitioned to present the question to the voters again. Noted Oct. 1.

†Cambridge, Ill.—(Official)—The following bids were received, Oct. 12, by the Highway Commission of Henry County, for the construction of the Baxter Bridge, Atkinson Township: Modern Steel Structural Co. (superstructure only), $1742; PORTER-McCULLY CONSTRUCTION CO., Mackinaw, Ill., $4400 (awarded contract); Joliet Bridge & Iron Co., $4647; C. H. Hamann, $4400; Continental Bridge Co. (superstructure only), $1875; Decatur Bridge Co., $4460.

De Pere, Wis.—The 475-ft. bridge over the Fox River at this point must either be repaired at once, at a cost of about $15,000, or a new structure, estimated to cost $75,000, will be necessary. M. W. Torkelson, State Bridge Engr., Madison, Wis., is in favor of the new bridge. Noted Aug. 13.

Madison, Wis.—The State Highway Commission, M. W. Torkelson, Bridge Engr., is having plans prepared for the construction of a four-span bridge in the Town of Dewey, Rusk County. W. O. Hotchkiss, Capitol Bldg., Madison, is Secy. of the Highway Comn.

†Larned, Kan.—The Commissioners of Pawnee County, Larned, and of Edwards County, Kinsley, have awarded the contract for the construction of a 510-ft. bridge over the Arkansas River at Nettleton to the MIDLAND VALLEY BRIDGE CO., at $6300. Pawnee County also plans the construction of two other bridges, one at Garfield, and the other five miles east of Larned.

†Fairmont, Minn.—The City Council has awarded the contract for the construction of a reinforced-concrete bridge to O. C. GOULD & SON, Fairmont, at $6600.

†Contact, Mont.—The Commissioners of Park County, Livingston, have awarded the contract for a bridge over the Salmon River at Contact, to the JOHN BURKE CO., Salt Lake City, Utah. The bridge will be 60 ft. long, of steel with concrete abutments.

Lewistown, Mont.—The Commissioners of Fergus County have awarded the contract for a bridge over Ross Fork to the SECURITY BRIDGE CO., Lewistown, at $5600.

St. Louis, Mo.—At the regular election, on Nov. 3, the citizens will vote on the question of a bond issue of $2,750,000 to be used for constructing the approaches of the Free Bridge over the Mississippi River. James A. Hooke is Dir. of Pub. Utilities. Noted May 14.

†Warren, Ark.—The Bridge Commissioners of Bradley County have awarded the contract for the construction of a steel bridge across the Saline River, on the Warren-Pine Bluff Road, to the MEMPHIS BRIDGE CO., Memphis, Tenn., at $16,500. Noted Sept. 17.

†Beaumont, Tex.—(Official)—The Commissioners of Jefferson County have awarded the contract for the construction of a 96-ft. timber bridge, with a 20-ft. lift span, over Taylor's Bayou, to SPENCE & HOWE, Port Arthur, Tex. Fred R. Blanchette is County Road Engr. Noted Oct. 1.

Dallas, Tex.—It is reported that the City Engineer will soon prepare plans for the construction of a viaduct at Merlin St. The Gulf, Colorado & Santa Fe Ry. will pay a part of the cost of the structure. J. M. Preston is City Engr.

†Houston, Tex.—The International & Great Northern Ry. has awarded the contract for the construction of a steel bascule bridge over the Buffalo Bayou to the AMERICAN BRIDGE CO., at $35,000.

Idabel, Okla.—The question of a bond issue of $122,000, to be used for the construction of 37 bridges, will be submitted to the voters of McCurtain County at the regular election of Nov. 3.

Caldwell, Idaho—Bids will soon be asked by the Commissioners of Canyon County for the construction of a steel bridge to replace the bridge over Indian Creek on the county line between Canyon and Ada Counties, and for a steel bridge over Willow Creek in the northern part of the county. Fred H. McConnell is County Engr.

Portland, Ore.—The Southern Pacific Co. and the Oregon-Washington R.R. & Navigation Co. jointly are having plans prepared by H. W. Holmes, Portland, for a number of bridges and approaches to be placed over crossings. The largest bridge will be located at East 37th St. It will be of reinforced concrete, and is estimated to cost $40,000.

Vale, Ore.—Press reports state that the taxpayers of Malheur County will shortly hold an election to vote on the question of a bond issue of $30,000 for the purpose of building a bridge across the Snake River, near Nyssa.

Bakersfield, Calif.—Bids will be received, until 2 p.m., Oct. 28, by the Board of Supervisors of Kern County, for constructing bridges and culverts on about 5.6 miles of the Bakersfield-Glennville Road, Div. 9, Sect. 2. All corrugated iron pipe to be furnished by the county. P. H. Everett is Ch. Engr.

†Red Bluff, Calif.—The Board of Supervisors of Tehama County has awarded contracts for the construction of four bridges in the county to McCARTNEY & HASKELL, at $11,613. Noted Oct. 8.

Santa Barbara, Calif.—The Board of Supervisors of Santa Barbara County will soon advertise for bids for the construction of a 400-ft. bridge at El Guamada, estimated cost, $40,000, and for a 625-ft. bridge over the Arroyo Honda, cost, $75,000. Both will be of reinforced concrete. F. F. Flourney is County Surv.

†Santa Cruz, Calif.—The contract for the construction of four bridges on the State Highway near Santa Cruz has been awarded to OTTO PARLIER, Tulare, Calif., at about $13,000.

Ottawa, Ont.—The City Council has authorized Archibald Currie, City Engr., to advertise for bids at once for the construction of a steel bascule bridge at Pretoria Ave. The estimated cost is $120,000.

Victoria, B. C.—Plans have been prepared, and it is reported that a by-law will be submitted to the ratepayers this year, for the construction of a bridge on Johnson St., to cost about $750,000. Wellington J. Dowler is City Clk.

WATER SUPPLY—IRRIGATION

Auburn, Maine—The construction of a reservoir at East Auburn is contemplated by the city to furnish water and fire protection. Forrest Bisbee is Supt. of Water Wks.

†Gardiner, Maine—(Correction)—In the issue of Sept. 17 it was stated that Young & Hyde, New York, N. Y., were awarded the contract for constructing a slow sand filtration plant at Gardiner. The bids have been rejected and the contract readvertised, bids being received Oct. 1. The contract has now been awarded to J. H. FERGUSON, Dorchester, Mass., at $47,128. Noted Sept. 17.

Newburyport, Mass.—Bonds for $55,000, recently voted by the citizens for the improvement of the water-works, have been sold. Noted Sept. 24.

Bellmore, N. Y.—Plans have been filed with the State Conservation Commission by the Bellmore Citizens Water Co. for the installation of a new water system for Bellmore. The estimated cost is $40,000. Townsend G. Smith is Engr.

★New York, N. Y.—(Official)—Bids will be received by the Board of Water Supply, Municipal Bldg., until 11 a.m., Nov. 10, for Contract 160, for the construction of the Moodna Siphon supplementary shaft and tunnel of the Catskill aqueduct. Charles Strauss is Pres. of the Bd. For details, see advertisement under "Contracts to Be Let."

New Brunswick, N. J.—The City Water Commission plans to increase the water-storage capacity. Plans are being prepared.

Buckhannon, W. Va.—The Buckhannon Light & Water Co. plans to construct a 2,000,000-gal. reservoir. J. G. Mayfield is Gen. Mgr.

Allendale, S. C.—Bids will be received, until Nov. 18, by W. F. Googe, Chn. Comrs., Pub. Wks., for constructing water and sewer systems and electric-light plant. H. S. Jaudon Engineering Co., Savannah, Ga., is the Engr. Noted June 4.

†Batesburg, S. C.—(Official)—The contract for furnishing 6-in. c.-i. class C water pipe, two-way hydrants, valves and specials has been awarded to R. L. FARMER, Springfield, S. C., at $0.62 per lin.ft., $28 each, $15 each and $0.03 each, respectively. J. B. Holman is Pres. Bd. of Pub. Wks. Noted June 11.

★Mullins, S. C.—(Official)—Bids will be received by the Board of Public Works until 4 p.m., Oct. 29, for constructing a water system. Plans are on file at the office of F. A. Smith, Chn. Bd. of Pub. Wks.

Covington, Ga.—The Council contemplates constructing a reservoir for the water system. J. H. Overholt is Clk.

Louisville, Ga.—See item under "Sewers."

Lakeland, Fla.—At an election held Oct. 6, bonds for $130,000 were voted by the citizens, the proceeds of which will be used for the improvement of the water system and electric-light plant. Noted June 4.

Palmetto, Fla.—Bids will be received until 2 p.m., Oct. 26, by A. M. Lamb, Pres. of Council, for furnishing two 40- to 50-hp. kerosene oil Diesel or semi-Diesel engines and two 500-gal. triplex pumps. J. B. McCrary Co., Atlanta, Ga., is the Engr.

†Bessemer, Ala.—The contract for constructing a sanitary sewage disposal plant has been awarded to the SOUTHERN ASPHALT CO., at $76,494.

Gulfport, Miss.—Bids will soon be received for the construction of a water system estimated to cost $8000. Hobart D. Shaw is Engr.

Houma, La.—Bids will be received by the Mayor until Nov. 6 for furnishing a centrifugal pump with a capacity of 200 gal. per minute, directly connected to a 20-hp. motor.

Mansfield, La.—Bids will be received, until Nov. 3, by L. E. Colvin, City Clk., for furnishing and installing pumping machinery in pumping plant now under construction.

Bluffton, Ohio—The village contemplates spending $7000 for the repair of the water system.

Canton, Ohio—The Water Committee of the City Council plans to engage an engineer to make an investigation and survey of the water situation at Canton.

✚Cleveland, Ohio—The contract for furnishing pumping machinery for the city water-works has been awarded to ALLIS-CHALMERS MFG. CO., Milwaukee, Wis., at $259,000. Noted Oct. 1.

Kenmore, Ohio—Bonds for $35,000 were voted by the citizens, Oct. 10. The proceeds will be used for the installation of a water system. Payne-Gillen Engineering Co., Akron, is the Engr.

Toledo, Ohio—The Director of Public Service has been asked by the Council to purchase two 500-hp. boilers with mechanical stokers for the water-works and a tar extractor for the gas engines of the filtration plant.

✚Grand Ridge, Ill.—The contract for laying 14,000 ft. of c.-i. water mains has been awarded by the Village Trustees to H. C. WOOLCOX, Oglesby, at $10,000. Noted Oct. 8.

Grays Lake, Ill.—Bids will be received, until Nov. 2, by the Village Clerk, for furnishing deep well pump and motor. D. G. White is Clk.

★Oglesby, Ill.—(Official)—Bids will be received until 8 p.m., Nov. 16, for driving a 1650-ft. artesian well. John Corgiat is City Clk. For details, see advertisement under "Contracts to Be Let."

✚Red Bud, Ill.—The contract for constructing a water system has been awarded to KATZ CONSTRUCTION CO., Omaha, Neb., at $18,606. Bids opened Oct. 9. Noted Oct. 1.

Elkhorn, Wis.—The driving of a new well, 1500 to 1600 ft. deep is being considered by the Water and Light Commission.

Hayward, Wis.—A special election will be held Nov. 7, to vote on the question of issuing bonds for $12,000 for the erection of a water-works.

Manitowoc, Wis.—Bids are being received by Arthur Reichert, City Clk., for furnishing and erecting one 3,000,000-pumping engine, complete with condenser, air pumps, piping, valves and auxiliary apparatus and two tubular boilers at the city pumping station.

✚Wabeno, Wis.—The contract for installing a water system has been awarded to LOWENK & CHAFEE, Rhinelander, Wis. Bids opened Oct. 1. Noted Sept. 24.

✚Wauwatosa, Wis.—Contracts have been awarded by the County of Milwaukee for improvements and extensions to the water systems at several of the county institutions as follows: To PUBLIC SERVICE CONSTRUCTION CO., Omaha, Neb., for general contract, including water mains; KEEHLER CO., Williamsport, Penn., for boiler; GENERAL CONCRETE CONSTRUCTION CO., Chicago, Ill., for stack; WISCONSIN CEMENT CONSTRUCTION CO., Milwaukee, for reservoir and RELIANCE BOILER WORKS, for breeching. Noted Oct. 1.

Des Moines, Iowa—An election will be held Nov. 3 to vote on the question of issuing bonds for $2,450,000, the proceeds of which to be used for the purchase and improvement of the water-works. James R. Hanna is Mayor.

✚Redwood Falls, Minn.—The contract for constructing water mains and sewers has been awarded to WILLIAM C. FRAZER, St. Paul, at $9721.

✚Riverton, Minn.—The contract for installing water and sewer systems has been awarded to POLLOCK BROS., at $17,115.

✚Capper, Wyo.—The contract for constructing water and sewer systems has been awarded to GORDON-TAYLOR CONSTRUCTION CO., Denver, Colo., at $69,360 and $13,030, respectively. Noted June 18.

Clydepark, Mont.—Bonds for $18,000 have been voted by the citizens for the construction of a water system. C. H. Green, Spokane, Wash., is Engr. Noted July 23.

Miles City, Mont.—Plans have been prepared for the construction of a concrete dam, 300 ft. long, to be built by the Tongue River Land & Livestock Co., Miles City. Wallis Huidekoper is Vice-Pres.

Winnett, Mont.—H. W. Dobb, of the Milwaukee Ry., and W. J. Winnett, Winnett, will organize a company and will build a concrete reservoir and dam about eight miles from the city.

Barstow, Tex.—Bids will be received until Nov. 15 for the construction of an irrigation system for Ward County District No. 2. Bonds for $475,000 have been voted for this purpose.

✚El Paso, Tex.—The contract for installing pumps and boilers in the water works has been awarded by the City Council to FULTON IRON WORKS, St. Louis, Mo., at $43,300. Noted Oct. 1.

✚Livingston, Tex.—The contract for constructing a water system has been awarded by the city to BROWNE & WILDER, Houston, at about $25,000. Noted Oct. 15.

Rusk, Tex.—Bonds, have been voted by the citizens for making extensions to the municipal water system.

Yale, Okla.—The city contemplates issuing bonds, the proceeds of which to be used for the extension of the water and electric-light systems.

McCammon, Idaho—A company formed by George H. Campbell and others will build a reservoir and pipe line, estimated to cost $15,000, on lands adjacent to the Lava Hot Springs, leased from the State Land Board.

Roberts, Idaho—The North Lake Canal Co. is now being incorporated and will construct an irrigation system to water 30,000 acres from waters of Crystal Lake.

Wendell, Idaho—The citizens contemplate issuing bonds for $10,000, the proceeds of which to be used for the purchase and improvement of the water system.

Salt Lake City, Utah—All bids received by the city, Oct. 1, for constructing a rubble concrete dam at Twin Lakes, Big Cottonwood Canyon, have been rejected and contract has been readvertised. Sylvester Q. Cannon is City Engr.

✚The contract for constructing a reinforced-concrete reservoir at Fifth and South St. has been awarded to R. E. WILSON, 31 Harmony Pl., Salt Lake City, at $35,411. Noted July 9.

Ellensburg, Wash.—The Cascade Irrigation District is preparing to replace all wooden flumes with steel. The estimated cost is $138,000.

The Ellensburg Gas & Water Co. will build a three-mile extension to its system to supply the village of Kittitas.

Alturas, Calif.—According to press reports the Modoc County Irrigation Co. plans to construct an irrigation system, to cost $1,000,000. A. T. Currier is Pres. of the company.

Azusa, Calif.—An election will soon be held to vote on the question of issuing $35,000 in bonds for the construction of a new water works and $20,000 in bonds for the construction of a lighting plant.

San Diego, Calif.—Plans have been prepared and bids will soon be received for the construction of a filtration house and tanks on the lower Otay dam. The estimated cost is $60,000. Noted Aug. 27.

Santa Ana, Calif.—The Allis-Chalmers Co., at $18,983 and $20,663, was low bidder for furnishing a pumping engine and boiler for the water works. Bids opened Oct. 5. Noted Sept. 24.

Leamington, Ont.—The Town Council has authorized the construction of water mains from the lake and the installation of additional equipment. R. M. Selkirk is Clk.

Stettler, Alta.—The Town Council will extend the water system at an estimated cost of $8000 and the electric light system at a cost of $10,000. J. Jamieson is Engr.

SEWERS

✚Augusta, Maine—The contract for constructing sewers in Chestnut and Willow St. has been awarded to FRED E. WENTWORTH.

Old Orchard, Maine—Bonds for $5000 for the extension of the sewer system in East Grand Ave. have been voted.

✚Boston, Mass.—Bids were received, Oct. 8, for constructing sewers in East First St. The contract has been awarded to ANTONY CEFALO, at $4102. Other bids were: Anthony Baruffaldi, $4436; M. H. Kelley, $5810; J. J. Conway, $6077, and T. J. O'Connell, $6449. L. K. Rourke is Comr.

✚Bids were received, Oct. 9, as follows, for constructing sewers in Dempster St.: ANTONY CEFALO, at $7171 (awarded contract); Anthony Baruffaldi, $7269; J. J. Conway, $7530; M. DeSisto, $7584; M. H. Kelley, $8325; M. DeMattee, $8794; Louis Balboni, $8921, and Charles J. Jacobs Co., $9561. L. K. Rourke is Comr.

Bids will be received, until Oct. 22, by the Public Works Department, for constructing sewers in Greenleaf and Howland St., Roxbury District, and in Morse St., Dorchester. L. K. Rourke is Comr.

Worcester, Mass.—The Sewer Committee contemplates spending $12,000 for sewer connections in Chandler St.

★Woonsocket, R. I.—(Official)—Bids will be received, until 4:45 p.m., Nov. 2, by the Board of Sewer Commissioners, for constructing a sewer in the Fairmount District. Frank H. Mills is City Engr.

✚New York, N. Y.—(Borough of Brooklyn)—(Official)—The contract for constructing a sanitary sewer in West 27th St. from Surf Ave. to Neptune Ave., has been awarded to D. DONEGAN CO., 5904 14th Ave., Brooklyn, at $11,846. Bids opened Oct. 7. Noted Oct. 1.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by William Williams, Comr. Water Supply, Gas and Electricity, Municipal Bldg., Manhattan, until 2 p.m., Oct. 26, for dismantling one boiler in the Ridgewood North Side pumping station, and one boiler in the Jameco pumping station No. 2, and transporting the two boilers to the Jameco pumping station No. 1 and reerecting them.

(Borough of Brooklyn)—(Official)—Bids will be received by L. H. Pounds, Pres. of the Borough, until 11 a.m., Oct. 27, for constructing sewers in the following streets: In East 17th St. from Ave. O to Ave. P; in East 13th St. from Ave. N to Ave. O; in 71st St. from 18th Ave. to 19th Ave.; in 11th Ave. between 53d and 54th St.; in East 13th St. between Ditmas and Newkirk Ave.; in Williams Ave. from Louisiana Ave. to Hegeman Ave.; in 64th St. from 14th Ave. to New Utrecht Ave.; in Brooklyn Ave. from Ave. D to Clarendon Road; and for constructing house connections in a number of streets.

(Borough of Brooklyn)—(Official)—Bids will be received by L. H. Pounds, Borough Pres., until 11 a.m., Oct. 30, for constructing sewer basins and temporary drains in a number of streets.

Syracuse, N. Y.—The low bidder for completing the Onondago Creek sewer was the Merrill-Ruckgaber Co., 50 Church St., New York, at $153,105. Bids opened Oct. 7. Noted Oct. 1.

Syracuse, N. Y.—The Common Council has authorized the construction of a 12-in. sewer in Lancaster Ave., a 15-in. sewer in Bellevue Ave., and a 12-in. sewer in Crescent Ave.

Belvidere, N. J.—The Board of Freeholders has instructed the Directors of the County Almshouse to build a sewage disposal plant in accordance with recent orders received from the State Board of Health.

Elizabeth, N. J.—(Official)—Bids will be received by the City Council, until 8 p.m., Nov. 5, for constructing a sewer in Atlantic St., from Third Ave. to near Fourth Ave. William P. Neafsey is Comr.

Jersey City, N. J.—Bids will be received by the City Commissioners, until 2 p.m., Oct. 29, for constructing a 48-in. c.-i. pipe sewer in Secaucus Road from Tonnelle Ave., east. Michael I. Fagen, City Hall, is City Clk.

✝Plainfield, N. J.—(Official)—Bids were received by the Sanitary Sewerage Commission, Oct. 7, for constructing a sewer system (A), and sewage disposal plant (B), in Piscataway Township as follows: CAULDWELL-WINGATE CO. & ATLANTIC CONSTRUCTION & SUPPLY CO. ASSOCIATION, New York, N. Y., (A) $100,909 (awarded contract), (B) $156,-465; EDWARD L. BADER, Atlantic City, (B) $133,102 (awarded contract), (A) $184,406; John C. Scrade, Inc., (A) $103,910; Fusco Construction Co., $109,779, (B) $143,634; Schneider Stelle Co., (A) $110,296, (B) $205,020; George P. Olcott & Son, (A) $110,462, (B) $170,002; Kelley-McFeeley Co., $114,151, (B) $181,406; H. C. Brooks Co., Inc., (A) $117,550; T. Foster Callahan, (A) $119,755; Merrill-Ruckgaber Co., (A) $122,585; Ryan & Reilly Co., (A) $122,950; William McCarthy, (A) $127,169; H. K. Corbin Co., Inc., (A) $128,650; John W. Heller, (A) $133,-075, (B) $161,342; Joseph L. Sigretto & Co., (A) $131,901, (B) $156,434; Whiting-Turner Construction Co., (A) $146,751; New York & New Jersey Construction Co., (A) $150,723, (B) $187,-783; Charles Ippolito, (A) $171,573, (B) $216,995; Michael Garafano & Di Napoli & Toriello Construction Co., (A) $194,-574; Stobaugh Contracting Co., (A) $198,633; J. B. Pennell & Co., (A) $217,241; Herbert O. Gardner & Andrew T. Van Cleve, (B) $149,032; Suburban Engineering Co., (B) $149,849; Pitt Construction Co., Inc., (B) $154,077; Arthur E. Smith, (B) $159,285; Mason Hilton & Co., (B) $171,500; Eon Engineering & Construction Co., (B) $180,523; L. B. Cleveland, (B) $196,341; and Pratt, Reed, Phillips & Co., (B) $231,474. George W. Fuller, 170 Broadway, New York, N. Y., is Engr. Noted Sept. 24.

Downingtown, Penn.—The Council contemplates installing a sewer system, estimated to cost $75,000.

Portvue (McKeesport post office), **Penn.**—The borough plans to install a sewer system. H. D. Reed is Clk.

Baltimore, Md.—An election will be held in November to vote on the proposition of issuing $3,000,000; the proceeds will be used for the extension of the sewer system.

Rockville, Md.—Bids were received, Oct. 7, by John J. Higgins, Clk., for constructing a sewer system and sewage disposal plant. The Warren F. Brenizer Co., Washington, D. C., was low bidder at $21,820 for constructing sewers, and the Cantrell Construction Co., Philadelphia, Penn., was low bidder at $10,000 for constructing the sewage disposal plant. Noted Oct. 1.

Southport, N. C.—The Board of Aldermen will have plans prepared for the installation of sewer and water systems.

Allendale, S. C.—See item under "Water Supply and Irrigation."

★Mullins, S. C.—(Official)—Bids will be received by the Board of Public Works, until 4 p.m., Oct. 29, for constructing about six miles of sewer mains. F. A. Smith is Chn., Bd. Pub. Wks.

Louisville, Ga.—The low bidders for installing a sewer system and extending the water system were Mischler & Flynn, Chattanooga, Tenn., at $12,535. Bids opened Oct. 6. Noted Oct. 1.

✝Savannah, Ga.—The contract for constructing sewers has been awarded by the Mayor to GADSDEN CONTRACTING CO., Savannah, and GUILD & CO., Chattanooga, Tenn., at $510,000, and to A. J. TWIGGS & SONS, at $136,994. Noted Aug. 27.

Tampa, Fla.—J. C. McNeill, Tampa, was low bidder, at $101,378, for completing the Hyde Park sanitary sewer system. Noted Oct. 15.

★Tampa, Fla.—(Official)—Bids will be received by the Board of Commissioners of Public Works, until 2 p.m., Oct. 28, for constructing sewers in Section 8, Hyde Park. D. B. McKay is Chn. Noted Oct. 15.

Georgetown, Ky.—An election will be held, Nov. 3, to vote on the proposition of issuing $20,000 in bonds, the proceeds to be used for the construction of sewers.

✝Louisville, Ky.—The contract for building a sewer in Locust St. has been awarded to K. A. BARKER, Louisville, at $15,900.

Cleveland, Ohio—No bids were received by the city for the purchase of $100,000 in sewer bonds for the construction of a sewage disposal plant.

Fostoria, Ohio—All bids received Oct. 9, by E. K. Cunningham, Dir. of Pub. Ser., for installing a sewage disposal plant have been rejected. Noted Sept. 3.

Lindenwald (Hamilton post office), **Ohio**—A sanitary sewer system will be constructed in Lindenwald, according to press reports.

Minerva, Ohio—(Official)—Bids will be received by Austin Freed, Clk., until noon, Nov. 4, for constructing a storm water sewer.

Zanesville, Ohio—Bids will be received, until 11 a.m., Nov. 9, by the County Commissioner, for building 1200 ft. of 24-in. vitrified pipe storm sewer in Springfield Township.

Peoria, Ill.—Bids will be received by the Board of Local Improvements until Oct. 26, for constructing one sanitary and one storm sewer. Sherman W. Eckley is Pres. of the Bd.

✝Antigo, Wis.—The contract for constructing a sewer extension in Sixth Ave. has been awarded to CONAHEN & GARDINSKY.

West Allis, Wis.—Bids will be received by the Acting Board of Public Works until Oct. 24, for constructing 10-, 12-, 15- and 24-in. sewers in various streets. A. L. Kenny, J. W. Schumacher and William Eggert are members.

★Clinton, Iowa—(Official)—Bids will be received by Frank W. Leedham, City Clk., until 8 p.m., Nov. 10, for constructing a sanitary and storm sewer in District No. 4.

✝Park Rapids, Minn.—A contract for constructing a sewer system has been awarded to the GRAND FORKS CEMENT CO., at $5495. Other bids were: Hugh T. Bosworth, $5750; Black Hawk Cement Co., $5703; Wm. C. Fraser, St. Paul, $5650.

Pine City, Minn.—(Official)—Bids will be received by H. J. Buirge, Village Clk. until 7:30 p.m., Oct. 28, for constructing a sanitary sewer system. J. F. Druar, 312-316 Commercial Bldg., St. Paul, Minn. is Engr.-in-Charge.

✝Riverton, Minn.—See item under "Water Supply and Irrigation."

Fort Scott, Kan.—Bids will be received by Worley & Black, Reliance Bldg., Kansas City, Mo., Engrs.-in-Charge until Oct. 27 for constructing a sewage and purification plant. The plant including outlet sewers will cost approximately $25,000. Noted Oct. 1.

✝Columbus, Neb.—According to press reports a contract for constructing a sewer system has been awarded to the OFFERMAN CONSTRUCTION CO., South Omaha at $21,500.

✝Casper, Wyo.—See item under "Water Supply and Irrigation."

Portland, Ore.—According to press reports bids will be received by the City Auditor about Dec. 1, for constructing a trunk sewer in Willow and East 82d St. The work consists of 3500 lin.ft. 8- to 24-in. pipe sewer, 15 ft. deep and 1780 lin.ft. 30- to 60-in. concrete sewer, 20 ft. deep. The estimated cost is $187,600.

✝Huntington Beach, Calif.—A contract for constructing a section of the municipal sewer system has been awarded to JOSEPH CHUTUK, Los Angeles, at $11,723.

✝Los Angeles, Calif.—The contract for constructing a sewer in Brent St. from East Fourth to East Eighth St. has been awarded to LEO MILETICH, at $50,000.

Esquimalt, B. C.—Bids will soon be received by the City Council for constructing a sewer in Constance Ave. District. The estimated cost is $300,000. C. H. Topp, 211 Pemberton Ave., Victoria, B. C., is Engr.

GARBAGE

✝Boston, Mass.—The following bids were received by L. K. Rourke, Comr. Pub. Wks., for the construction of a refuse receiving station at Ward St., Roxbury District: MERRIMAC CONSTRUCTION CO., $15,973 (awarded contract); John Bowen, $17,784; W. H. Ellis & Son Co., $18,326; Hapgood, Frost & Co., $18,360; M. J. Fish & Son, $18,894; C. J. Jacobs Co., $18,986; Michael Meehan, $19,410; H. P. Converse & Co., $22,-684. Noted Oct. 1.

Yonkers, N. Y.—The City Council has authorized the City Engineer to prepare plans for a garbage crematory.

Allentown, Penn.—The city plans to install a garbage disposal plant and collection system similar to the one at Easton, Penn.

Dayton, Ohio—The City Commission has authorized the issue of $10,000 in bonds for the construction of five buildings to house the garbage incinerator equipment which will be installed later at an additional cost of $40,000.

Maryville, Ill.—Plans reported completed for the installation of a garbage incinerator.

Okmulgee, Okla.—Bids will be received until Nov. 9 by the Commissioner of Finance for the construction and equipment of an incinerator and garbage disposal plant, having a capacity of five tons per 24 hours. Noted Sept. 3.

Toronto, Ont.—Street Commissioner Wilson is having plans prepared which will be completed about Nov. 15, for new incinerator plants to cost about $150,000.

STREETS AND ROADS

✝Boston, Mass.—A contract for constructing 10,500 lin.ft. of macadam road in Becket has been awarded to the LANE CONSTRUCTION CO. at $16,096. Other bids were: Amos D. Bridge's Sons, Inc., Hazardville, Conn., $16,325; Lynn, Holman & Cobb, $16,498; B. Preini, $16,651; Olin T. Benedict, Pittsfield, Mass., $16,720; M. Bianco, $16,806; M. L. Camarco, $17,238; H. I. Pier, $17,343; Horne Lowe Construction Co., $17,-721; Way & Cellilli, $17,859; R. F. Hudson, Melrose, $17,963; F. E. Ellis, Melrose, $18,198; R. W. Emerson, $18,329; R. Pollato, $18,995; J. M. McCormick, $20,246; Hugh J. Maguire, $20,-996. Noted Sept. 17.

✝Boston, Mass.—The contract for paving Langden St., Roxbury District, has been awarded to the SIMPSON BROS. CORPORATION, at $6069. The only other bid was that of Charles B. Telless, at $6610. Noted Oct. 8.

✝The contract for the construction of 10,000 lin.ft. of gravel roadway in Lanesboro has been awarded by the State Highway Commission to R. W. EMERSON, Pittsfield, at $10,313. Other bids were: Way & Cellilli, Springfield, $11,-058; Framingham Contracting Co., $11,483; P. Perini, Rutland, $11,589; A. D. Bridge's Sons, Inc., $11,931; Lindberg & Cobb, Pittsfield, $12,046; Colonial Construction Co., Boston, $12,288; M. L. Camarco, Lee, $13,192; Horne Lowe Construction Co., Millbury, $13,233; S. W. Menaque, Stockbridge, $13,823; W. R. Pratt, Dalton, $13,918; Hyde, Crowe & Walsh, Pittsfield, $14,126; New England Contracting Co., Worcester, $14,523; Lane Construction Co., Meriden, Conn., $15,591; Cordner & Montague, Springfield, $16,463; Ross & Son, Woburn, $16,520.

✝Albany, N. Y.—Bids were received by the State Highway Commission, 55 Lancaster St., Oct. 15, for the construction of public highways by state aid, as follows:

Road No. 5518, Allegany County, 4.75 miles—William J. Fox, Oramel, $56,998; Frank L. Cohen, Buffalo, $58,877; Drake & Deane, Buffalo, $56,123; Greenfield Construction Co., Hornell, $57,720; Sullivan Construction Co., Syracuse, $56,596; Frank L. Malone, Syracuse, $57,544; Kennedy Construction Co., Albany, $53,587; Edward T. Beck & Co., Warren, Penn., $59,973; Wood & Tompkins, Hilton, $58,872; Thomas F. Shaughnessy, Albany, $54,189; McLaughlin & Burchill, Syracuse, $56,519. Award withheld.

Road No. 1161, Broome County, 0.38 mile—John Kelley, Elmira, $28,791; Tyne & Willey, Binghamton, $27,958; C. D. DEAN, Albany, $24,789 (awarded contract); Joseph Walker Construction Co., Albany, $27,092; Arthur D. Osborne, Binghamton, $28,021.

Road No. 5243-B, Broome County, 4.29 miles—LANE CONSTRUCTION CORPORATION, Meriden, Conn., $22,879.

Road No. 5243-A, Broome County, 4.67 miles—Lane Construction Corporation, Meriden, Conn., $66,760; JOSEPH WALKER CONSTRUCTION CO., Albany, N. Y., $64,894 (awarded contract).

Road No. 806, Chenango County, 5.63 miles—Schunnemunk Construction Co., Highland Mills, $97,448; Paddleford & King, Sherburne, $97,675; James Anderson, Albany, $101,992; Joseph Walker Construction Co., Albany, $94,025; NEWPORT CONSTRUCTION CO., Herkimer, $94,629 (awarded contract).

Road No. 1075, Cortland County, 5.25 miles—RICHARD HOPKINS, Troy, $45,449 (awarded contract); Joseph Walker Construction Co., Albany, $47,901; S. P. Hull, Cortland, $48,730; Hovey Benedict, Williamsport, Penn., $47,498; Amos D. Bridge's Sons, Hazardville, Conn., $45,647; Paddleford & King, Sherburne, $47,831, and nine others.

Road No. 5472, Cortland County, 2.11 miles—John P. Dugan & Co., Amsterdam, $28,323; Paddleford & King, Sherburne, $29,156; CROWE & WALSH, Pittsfield, Mass., $26,473 (awarded contract); Hovey Benedict, Williamsport, Penn., $26,938; Phelan & Sullivan, Utica, $29,325; S. T. Hull, Cortland, $28,005, and two others.

Road No. 822, Clinton County, 6.72 miles—Lynden Construction Co., Albany, $74,189; Bluff Point Stone Co., Plattsburgh, $64,755; Flood & Van Virt, Hudson Falls, $73,170; Spellman-Oliver Co., Chateaugay, $66,739; RICHARD HOPKINS, Troy, $64,195 (awarded contract); Keeseville Roads Co., Keeseville, $67,628; J. D. Moynehan, Port Henry, $70,535.

Road No. 1037-A, Erie County, 0.39 mile—Austin W. Simmons, Buffalo, $20,516; Fugate & Hutchinson, Olean, $20,370. Award withheld.

Road No. 985-A, Franklin Co., 0.92 mile—Tupper Lake Construction Co., Tupper Lake, $16,386; James L. Kehoe, Newburgh, $18,000; JOHN F. LEWIS, Albany, $14,426 (awarded contract); S. R. Russoff, Herkimer, $16,865.

Road No. 618, Fulton County, 9.26 miles—C. W. Tryon, Boyntonville, $98,590; Bridgeport Construction Co., Poughkeepsie, $97,988; Amos D. Bridge's Eons, Hazardville, Conn., $99,372; Hines Bros. & Welch, Gloversville, $99,621; LANE CONSTRUCTION CORPORATION, Meriden, Conn., $91,707 (awarded contract); James Martin, Utica, $102,131, and four others.

Road No. 5514, Hamilton County, 6.98 miles—Creeden & Pitou, New York, $103,754; Murray Construction Co., Troy, $106,390; PARKER HASSAM PAVING CO., Worcester, Mass., $101,310 (awarded contract); Brown & Lowe Co., Schenectady, $107,849; C. W. Tryon, Boyntonville, $106,342; William G. Fox, Saratoga Springs, $109,356, and five others.

Road No. 5513, Herkimer County, 0.90 mile—Thurman W. Dix, Burlington, Vt., $46,099; Phelan & Sullivan, Utica, $45,778; W. J. Kennedy, Utica, $46,194; Daniel L. Mott, Utica, $46,935; HARRY W. ROBERTS & CO., Utica, $45,352 (awarded contract), and one other.

Road No. 5411, Herkimer County, 0.09 mile—CROWE & WALSH, Pittsfield, Mass., $5542 (awarded contract); James Dempsey, Frankford, $6426.

Road No. 472, Herkimer County, 6.15 miles—Lane Construction Corporation, Meriden, Conn., $66,490; Joseph Walker Construction Co., Albany, $66,284; STATE HIGHWAY CONSTRUCTION CO., Beacon, $63,838 (awarded contract); James Anderson, Albany, $66,017; Newport Construction Co., Herkimer, $73,849.

Road No. 5515, Madison County, 0.81 mile—John H. Gordon, Albany, $10,374; S. P. Hull, Cortland, $10,391; C. O. McComb, Syracuse, $10,372; Paddleford & King, Sherburne, $10,498; John P. Dugan & Co., Amsterdam, $9914; CROWE & WALSH, Pittsfield, Mass., $9574 (awarded contract); W. K. Kennedy, Utica, $10,866.

Road No. 1201, Nassau County, 0.61 mile—Fairfield Landscape & Nurseries Co., New York, $7815; Heling Bros., Lindenhurst, $6998; Murray & Gardner, Inc., Center Moriches, $7836; Delta Contracting Co., Jamaica, $8496; John H. Eldert, Richmond Hill, $8103; James Garafano & Sons, Mt. Vernon, $7839; DAVID FALCONER CONTRACTING CO., Long Island City, $6822 (awarded contract).

Road No. 5445, Otsego County, 7.75 miles—Langen Construction Corporation, Albany, $96,646; Parker-Hassam Paving Co., Worcester, Mass., $98,486; Joseph Walker Construction Co., Albany, $96,803; Brown & Lowe Co., Schenectady, $98,796; Newport Construction Co., Herkimer, $92,797; Paddleford & King, Sherburne, $97,448; CARANEA CONSTRUCTION CO., Troy, $91,076 (awarded contract), and two others.

Road No. 1157, Oneida County, 13.73 miles—Dale Engineering Co., Utica, $149,853; James Anderson, Albany, $134,648; Eastover Construction Co., Utica, $156,256; P. H. Murray, Rochester, $148,484; Conroy & Nixdorf, Oneida, $145,046; Newport Construction Co., Herkimer, $147,456; JOSEPH WALKER CONSTRUCTION CO., Albany, $121,161 (awarded contract); State Highway Construction Co., Beacon, $155,962.

Road No. 5516, Onondaga County, 8.73 miles—J. W. Brennan Construction Co., Geneva, $128,313; Joseph Walker Construction Co., Albany, $129,880; James Anderson, Albany, $127,641; Sullivan Construction Co., Syracuse, $133,528; John Kelley, Syracuse, $128,497; Monroe Roads Co., Pittsford, $127,825; DALE ENGINEERING CO., Utica, $127,625 (awarded contract), and nine others.

Road No. 1200, Steuben County, 3.38 miles—P. H. Murray, Rochester, $42,797; ATLANTA CONSTRUCTION CO., Atlanta, $40,099 (awarded contract); Kennedy Construction Co., Albany, $40,636; C. O. McComb, Syracuse, $42,531; J. D. Hayes, Hornell, $40,635.

Road No. 5253-B, Steuben County, 5.71 miles—KENNEDY CONSTRUCTION CO., Albany, $23,764 (awarded contract); Atlanta Construction Co., Atlanta, $25,868.

Road No. 5510, Sullivan County, 8.18 miles—Jackson Bros., Cuddebackville, $113,969; Gruner & Hallenbeck, Harriman, $106,625; Ruddy-Saunders Construction Co., Troy, $111,922; HENRY McNAMEE, Eddyville, $102,754 (awarded contract); M. R. Aldrich, Poughkeepsie, $114,371; Bridgeport Construction Co., Poughkeepsie, $110,139, and three others.

Road No. 5517, Steuben County, 4.27 miles—Holleran Bros., Elmira, $46,560; Patrick Murray & Son, Elmira, $46,619; Joseph Walker Construction Co., Albany, $46,534; McLaughlin & Burchill, Syracuse, $45,505; Atlanta Construction Co. Atlanta, $46,845; Parker-Hassam Paving Co., Worcester, Mass., $46,129; Peter F. Conley Co., Horseheads, $47,362; Schroeder-Hicks Contracting Co., Rochester, $47,216; Bradley & Nolan, Corning, $45,528, and ten others. Award withheld.

Road No. 5350, Steuben County, 1.89 miles—Flower City Contracting Co., Rochester, $69,968; Frank L. Malone, Malone, $69,392; Bradley & Nolan, Corning, $70,083; JOSEPH WALKER CONSTRUCTION CO., Albany, $68,294 (awarded contract); Thomas Fitzgerald Co., Fredonia, $68,982; Greenfield Construction Co., Hornell, $69,386, and 11 others.

Road No. 1211, Seneca County, 1.49 miles—Sullivan Construction Co., Syracuse, $71,139; Thomas F. Shaughnessy, Albany, $69,523; Drake & Deane Co., Buffalo, $70,258; PATRICK D. CONLEY, Ithaca, $69,511 (awarded contract); J. W. Brennan Construction Co., Inc., Geneva, $70,230; Stanley Construction Co., Buffalo, $71,554, and nine others.

Road No. 1189, Tompkins County, 6.34 miles—Peter F. Connolly Co., Horseheads, $63,004; Patrick D. Conley, Ithaca, $63,997; WILLIAM HAZZARD, Trumansburg, $60,941 (awarded contract); Richard Hopkins, Troy, $63,715; Lane Construction Corporation, Meriden, Conn., $65,962; McGreevey, McGuigan & Baum, Elmira, $65,616.

Road No. 5364-A, Westchester County, 1.68 miles—State Highway Construction Co., Beacon, $21,992; James Garafano & Son, Inc., Mt. Vernon, $20,782; Frank E. Gore, New York, $24,242; Eggleston & Garthwaite, Yonkers, $21,463; Joseph Johnson Sons, West New Brighton, $21,102; ALEX ROHAN, Haverstraw, $20,269 (awarded contract).

Road No. 1210, Yates County, 6 miles—Atlanta Construction Co., Atlanta, $77,564; J. W. Brennan Construction Co., Geneva, $80,361; Ontario Roads Co., Inc., Manchester, Conn., $78,795; Charles M. Kelley, Penn Yan, $75,706; Greenfield Construction Co., Hornell, $81,999; Parker-Hassam Paving Co., Worcester, Mass., $82,397; McLaughlin & Burchill, Syracuse, $79,765. Award withheld.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by L. H. Pounds, Pres. of the Borough of Brooklyn, until 11 a.m., Oct. 27, for improving East Seventh St. from Ditmas to 18th Ave.; East Ninth St. from Ave. N to Ave. O; East 18th St. from Ave. M to Ave. N; East 22d St. from Ditmas to Newkirk Ave.; East 23d St. from Ave. M to Ave. N; East 24th St. from Ave. M to Ave. N; Hinsdale Ave. from Riverdale Ave. to New Lots Ave., and for 100 tons of refined asphalt.

(Borough of Manhattan)—(Official)—Bids will be received by R. A. C. Smith, Comr. of Docks, Pier "A," foot of Battery Place, North River, until noon, Oct. 27, for cement, sand and 1½-in. broken stone.

+Rome, N. Y.—The contract for paving Bouck St. from Dominick to Whitesboro St. has been awarded to the WARREN BROS. Co., at $7781.

Hoboken, N. J.—(Official)—Bids will be received, until 5 p.m., Oct. 28, by James H. Loudrigan, City Clk., for repaving and improving portions of Jefferson St., Madison St. and the adjoining streets to the extent necessary for a proper connection with the new improvements.

Jersey City, N. J.—(Official)—Bids will be received, until 2 p.m., Oct. 29, by Michael I. Fagan, City Clk., for asphalt paving on Enos Place from Sip Ave. to Newkirk St.; also for asphalt pavement on Stegman St., from Ocean Ave. to Garfield Ave.

Jersey City, N. J.—Bids will be received by the Board of Chosen Freeholders of Hudson County until 3 p.m., Oct. 23, for the sale of $150,000 in bonds, the proceeds of which will be used for repairing the Hudson County Boulevard.

Newton, N. J.—Bids will be received by the Board of Chosen Freeholders of Sussex County, until Nov. 9, for constructing the Newton-Sparta Rd. William Iliff is Dir. Noted Sept. 24 and Oct. 8.

Paterson, N. J.—The Board of Chosen Freeholders of Passaic County plans for the construction of a road from the Charcoal Road to Greenwood Lake Glens, and for the improvement of Charcoal Road, at a cost of about $30,000. County Engineer Garwood Ferguson will prepare plans.

Perth Amboy, N. J.—The City Council is negotiating with the Board of Freeholders for the improvement of New Brunswick Ave. Approximate cost is $15,000.

Harrisburg, Penn.—(Official)—Bids will be received by W. H. Lynch, Supt. of St. and Pub. Improvements, until noon, Oct. 24, for constructing approximately 31,000 sq.yd. of sheet asphalt.

Harrisburg, Penn.—Bids will be received until 10 a.m., Nov. 10, at the office of the State Highway Department, Capitol Bldg., for the following road construction: Washington County, Cecil Township—11,329 lin.ft. asphaltic concrete and 1500 lin.ft. brick block pavement 16 ft. wide. Chester County, Penn Township—6662 lin.ft. asphaltic bituminous macadam (penetration method) 16 ft. wide. Jefferson County, Brookville Borough—2400 lin.ft. brick block pavement 16 ft. wide. Beaver County, Moon and Hopewell Townships—13,195 lin.ft. brick block pavement 16 ft. wide. Edward M. Bigelow is Comr.

+Baltimore, Md.—The contract has been awarded by the city for the grading, curbing and paving with sheet asphalt on concrete base, McEldery St. from Linwood Ave. to Loney's Lane ,about 3400 sq.yd., to the BALTIMORE ASPHALT BLOCK & TILE CO., 231 Courtland St.

+Bel Air, Md.—The contract for paving Hughes Hill Road through Norrisville to the Pennsylvania State Line has been awarded to the JUNIATA PAVING CO., Philadelphia, Penn., at $32,317.

Princeton, W. Va.—Bids will be received by the Commissioners of Mercer County, until Oct. 29, for improving several roads and for constructing three steel bridges across the Bluefield River. W. I. Lee is Ch. Engr.

+Hamilton, Ala.—A contract for constructing approximately 50 miles of graded road has been awarded to BOYD & BRADSHAW, at $60,000. Noted Sept. 24.

Montgomery, Ala.—Bids will be received by Robert Lait, City Treas., until Oct. 27, for paving Dunbar St.

+Ozark, Ala.—(Official)—The contract for improving a section of the Ozark and Ariton Road has been awarded to J. G. BROWN, Montgomery, at $7455. As only $6042 has been appropriated, only part of the work will be don. Other bids were: J. J. Dunnovant, $8187; Whatley Bros., $8108; D. R. Cook & Co., $8852; Goodrich Construction Co., $9991. Noted Oct. 1.

Memphis, Tenn.—J. H. Weatherford, City Engr., has prepared plans for surfacing Summit St. from Union to Vinton Ave. with gravel.

Athens, Ohio—Bart Davidson, Dir. of Pub. Ser., will receive bids, until Oct. 24, for grading, draining, curbing and paving Stewart St.

Cincinnati, Ohio—Bids will be received by the County Commissioners, until noon, Nov. 6, for improving the Miles Road in Springfield Township and the North Bend Road in Green Township.

Cleveland, Ohio—(Official)—Bids will be received by the Board of County Commissioners, until 10 a.m., Oct. 31, for the improvement of the Pettibone Road from Broadway Road to Som Center in Solon Township. E. G. Krause is Clk. of the Comrs.

Girard, Ohio—(Official)—Bids will be received by the Village Council, until noon, Oct. 26, for improving sections of State and Prospect St.

†Lorain, Ohio—The contract for paving Oberlin Ave. has been awarded to the OHIO ENGINEERING CO., at $37,000. Noted Sept. 24.

Mansfield, Ohio—An election will be held in November to vote on the question of issuing $30,000 in bonds, the proceeds of which will be used for the improvement of the road from Mansfield to Ashland and from Mansfield to Wooster.

†Swanton, Ohio—The contract for paving North Main St. has been awarded to the MINNICK CONSTRUCTION CO., New Castle, Ind., at $15,657. Other bids were: McKinney Bros., Toledo, Ohio, $18,617; G. H. Heffner & Son, Celina, $17,160; R. C. Roach, Waterville, $16,548; Lininger & Burnett, Conneaut, at $16,432.

Wapakoneta, Ohio—Henry Moser, Dir. of Pub. Ser., will receive bids, until Nov. 6, for paving Perry and Main Sts.

†Indianapolis, Ind.—The contract for paving East New York St., from Dorman St. to Arsenal Ave., has been awarded to the REPUBLIC CONSTRUCTION CO., at $10,522.

Vevay, Ind.—(Official)—Bids will be received by the Treasurer of Whitley County, until 1:30 p.m., Nov. 7, for the sale of $18,560 in bonds for highway improvements.

Vincennes, Ind.—Bids will be received by H. J. Watts, until 4 p.m., Oct. 26, for paving 29,000 sq.yd. with asphalt, wood block, concrete or brick.

†Wyandotte, Mich.—The contract for paving Oak St., from 12th to 13th, has been awarded to R. D. BAKER & CO., at $13,067.

Champaign, Ill.—All bids received by the Board of Local Improvements for paving Healy St. have been rejected. The work will be readvertised.

†Moline, Ill.—The contract for paving 13th St. with asphalt has been awarded to the McCARTHY IMPROVEMENT CO.

†Monroe, Wis.—The contract for paving Emerson St. has been awarded to THOMAS QUINN, Madison.

†St. Paul, Minn.—The contract for paving a section of Robert St. has been awarded to the GENERAL CONTRACTING CO.

†Sioux Falls, S. D.—A contract for paving sections of Summit Ave. and Ninth St. has been awarded to C. H. ATKINSON CO., Watertown. Noted Sept. 3.

†Bozeman, Mont.—THE WARREN CONSTRUCTION CO. has been awarded the contract for paving College St. from Central to Tracy Ave.

†Kansas City, Mo.—THE CLEVELAND-TRINIDAD PAVING CO., Cleveland, Ohio, has been awarded the contract for paving Cypress St., from 24th to 27th St., 6097 sq.yd., with concrete. The approximate cost is $5426.

†Little Rock, Ark.—The contract for paving West 17th St. with asphalt has been awarded to M. D. L. COOK, at $5885.

Marion, Ark.—Bids will be received by F. K. Lashbrook, Secy. of the Crittenden County Road Improvement District, until noon, Nov. 3, for the sale of $325,000 in bonds, the proceeds of which will be used for the improvement of roads.

†Houston, Tex.—The contract for paving Webster St. from Crawford to St. Emanuel St. has been awarded to HORTON & HORTON.

(Official)—Bids will be received by Ben Campbell, Mayor, until 2 p.m., Oct. 24, for improving sections of Louisiana St.

Tulsa, Okla.—(Official)—Bids will be received by the Board of Commissioners, until 5 p.m., Oct. 26, for improving several streets. E. B. Cline is City Audr.

Albion, Idaho—At an election to be held in November, the citizens of Cassia County will vote on the question of issuing $50,000 in bonds, the proceeds of which will be used for constructing roads.

Everett, Wash.—An election will be held, Nov. 3, to vote on the question of issuing $1,500,000 in bonds for improving roads.

Vancouver, Wash.—(Official)—Bids will be received by the State Highway Board, until 2 p.m., Oct. 26, for improving the Pacific Highway between Woodland and La Center. W. R. Roy is Secy. of the Bd.

†El Monte, Calif.—A contract for improving approximately 23,000 lin.ft. of road has been awarded to J. O. STANFORD, Long Beach, at $15,000.

†Huntington Beach, Calif.—PEARSON & ANDERSON, Venice, have been awarded the contract at $24,742 for concrete paving on 17th St. and Delaware Ave. Noted Oct. 15.

†Inglewood, Calif.—The contract for improving Allen Ave. has been awarded to J. HEIN, 511 Stimson Bldg.

†Los Angeles, Calif.—GEO. H. OSWALD, O. T. Johnson Bldg., has been awarded the contract at $113,122, for improving Moneta Ave., between Slauson and Manchester Ave. The work consists of 525,200 sq.ft. asphalt paving, 17,900 ft. curb, 203,000 sq.ft. sidewalk, 17,963 sq.ft. concrete gutter, also a reinforced concrete culvert.

Martinez, Calif.—Bids will soon be received by the Board of Supervisors of Contra County for constructing the Bay Point-Martinez Highway. The estimated cost is $167,000.

Monterey, Calif.—The City Engineer is preparing plans for the improvement of Tyler, Pacific, El Dorago and Carmelito St. H. J. Schaufele is the Comr. of Pub. Wks.

Pasadena, Calif.—Bids will be received by H. Dyer, City Clk., until 9 a.m., Oct. 27, for improving Stevenson Ave. from East Orange Grove Ave. to Washington St. Approximately ¾ of a mile will be improved.

†Riverside, Calif.—The contract for improving a section of Magnolia Ave. has been awarded to JOHNSON & SHEA CO., Riverside, at $31,859.

Sacramento, Calif.—(Official)—Bids were received by the State Highway Commission, Oct. 5, for constructing roads in various counties as follows: (a) Humboldt County, Route 1, Sect. D; (b) Alameda County, Route 5, Sect. A.; (c) Santa Barbara County, Route 2, Sect. A; (d) Santa Barbara County, Route 2, Sect. C; (e) Santa Barbara County, Route 2, Sect. G and I; (f) San Luis Obispo County, Route 2, Sect. B; (g) San Luis Obispo County, Route 2, Sect. D; (h) Solano County, Route 2, Sect. D; (i) Imperial County, Route 12, Sect. A; (j) Sacramento County, Route 11, Sect. A; (k) Humboldt County, Route 1, Sect. G; George W. Conners, Eureka, (a) $30,937, (g) $49,750, (k) $28,524; William Crowley & T. E. Clarey, Eureka, (a) $28,625, (k) $25,993; Rush R. Smith, Fortuna, (a) $31,286, (k) $32,153; F. H. Green, Eureka, (a) $29,292, (k) $28,497; Elsemore & Jacobs, Eureka, (a) $33,906, (k) $18,778; Petersen & Grier, San Francisco, (b) $46,749; Palmer & McBryde, San Francisco, (b) $38,032; P. L. Burr, San Francisco, (b) $46,891, (e) $103,010, (g) $44,679; F. Rolandi, San Francisco, (c) $18,751, (d) $74,127, (f) $75,761; Rogers Bros. Co., Los Angeles, (c) $18,856, (d) $62,680, (f) $73,775, (i) $99,724; Rice & Dutcher, Imperial, (c) $21,264, (d) $67,953, (f) $78,902, (i) $86,052; Tieslau Bros., San Francisco, (d) $72,978, (f) $86,332; W. E. Calahan Construction Co., Arlington, (e) $97,432; R. H. McCray Co., Los Angeles, (e) $82,284; J. H. McMillen, Wasco, (b) $92,897, (g) $63,329; Brashear Burns Co., Los Angeles, (e) $82,411, (g) $61,191; C. H. Hudson, Los Angeles, (e) $79,191, (f) $76,920, (g) $47,111; Bates, Borland & Ayer, Stockton, (f) $78,825, (h) $46,153; J. W. Calback, San Diego, (f) $71,989, (i) $68,145; Berry Mackee & Co., San Francisco, (a) $50,787, (k) $27,213; Joseph Mulligan, Los Angeles, (g) $47,837; Richard Rothwell, Los Angeles, (g) $65,577; Marsh Bros. & Gardenier, Inc., San Francisco, (g) $53,009; Sandercock Transfer Co., San Luis Obispo, (g) $66,395; Enoch S. Hunt, Alameda, (g) $46,605; Mahoney Bros., San Francisco, (g) $53,837; A. M. Gorrill, San Francisco, (h) $47,054, (j) $39,141; Commary Petersen Co., San Francisco, (h) $63,943; Callahan & Hedrick, El Centro, (i) $72,132; Rochelt & Stevens, Los Angeles, (i) $69,921. Noted Sept. 24.

Sacramento, Calif.—Bids will be called in about two weeks for 23.7 miles of state highway construction, including 8.4 miles between Williams and Colusa County, 11.7 miles in Imperial County between Wells and Dixieland, and 3.6 miles in Orange County, on the easterly boundary. The estimated cost is $250,000.

†San Bernardino, Calif.—The contract for improving Sixth St. from B to I St. has been awarded to W. D. BOHAN, at $23,335. Noted Sept. 24.

Santa Monica, Calif.—Bids will be received by G. A. Murray, City Clk., until 2 p.m., Oct. 26, for improving 26th St. between the right-of-way of the Pacific Electric Ry. Co. and the northwest city limits.

†Santa Monica, Calif.—A contract for improving a number of streets has been awarded to the JOY CONSTRUCTION CO., at $36,114.

†Upland, Calif.—The contract for improving San Antonio Ave. has been awarded to the SOUTHERN CALIFORNIA CONSTRUCTION CO., Ocean Park, at $53,262.

†Whittier, Calif.—The contract for constructing about 100,000 sq.ft. of asphalt paving on Philadelphia St. has been awarded to the FAIRCHILD-GILMORE-WILTON CO., at $14,800. Noted Oct. 1.

East View, Ont.—The contract for constructing concrete sidewalks on Montreal Road has been awarded by the City Council to A. NEWLANDS, Belmont Ave., Ottawa, South, at approximately $8000.

†Ottawa, Ont.—A contract for constructing 32,976 sq.yd. of asphalt, 9808 sq.ft. water table, 13,598 lin.ft. of gutter and 4676 lin.ft. of curb and gutter has been awarded to the OTTAWA CONSTRUCTION CO., at $85,892.

INDUSTRIAL WORKS

Bridgeport, Conn.—Bids are being received by Briggs & Caldwell, Archs., 309 Security Bldg., for the construction of a cold storage building on Congress St., for the Terry Estate.

Hartford, Conn.—Bids are being received by the Capitol City Lumber Co., 115 Front St., for the construction of three buildings on Park St. Ford, Buck & Sheldon, 60 Prospect St., Hartford, are the Engrs.

†Stamford, Conn.—The contract for the construction of two buildings for Richards & Co. has been awarded to J. W. FERGUSON, Stamford.

Dunkirk, N. Y.—The Dunkirk Industrial Co. contemplates erecting a three-story silk glove mill, 57x57 ft., for the American Glove Co.

†Edwards, N. Y.—The contract for three reduction mills for the Northern Ore Co. has been awarded to DUNN & SHERIDAN, 1123 Broadway, New York.

Geneseo, N. Y.—The foundry of the Geneseo Foundry Co., recently destroyed by fire, will be rebuilt.

†Jamestown, N. Y.—The general contract for the construction of a three-story factory for the Seabury Co. has been awarded to ALBIN JOHNSON, Connecticut Ave.

†New York, N. Y.—(Borough of Bronx)—The general contract for the construction of the three-story reinforced-concrete bakery at Wales Ave. and 142d St. has been awarded to WILLIAM HENDERSON, INC., 516 Fifth Ave., New York.

New York, N. Y.—(Borough of Manhattan)—Plans have been completed by Maynicke & Francke, Archs., 25 East 26th St., for the construction of an 11-story stock house at 210 East 92d St. The estimated cost is $150,000.

New York, N. Y.—(Borough of Queens)—The Sterling Gum Co., Long Island City, will erect a five-story and basement factory on Harris Ave., Long Island City.

New York, N. Y.—(Borough of Richmond)—The Sullivan Bottle Works Co. is planning the erection of a factory on Gordon St., Stapleton.

✚New York, N. Y.—(Borough of Richmond)—The American Dock Co. has awarded the contract for the construction of the eight-story warehouse at Tompkinsville, S. I., to the B. & W. CONCRETE CO., Newark, N. J., at $180,000.

Syracuse, N. Y.—Mangin & Stedman, Archs., are receiving bids for the one-story, 60x170-ft. factory for the O. K. Mfg. Co. The estimated cost is $25,000.

Syracuse, N. Y.—The Syracuse Motor Car Co., 235 West Genesee St., contemplates erecting a garage on West Willow St. The estimated cost is $20,000.

✚Bordentown, N. J.—The contract for the construction of the one-story brick factory for L. Forman & Son has been awarded to H. B. MILLER, Edgewater, N. J. Noted Sept. 17.

✚Newark, N. J.—The Spring St. Realty Co. has awarded the contract to JAMES CONNELLY for additions and improvements to its factory at 36 Spring St.

Passaic, N. J.—The Passaic Glass Co., Passaic, has had plans prepared for an addition, one story, 40x60 ft.

Paterson, N. J.—T. A. Gillespie & Co., 50 Church St., New York, are having plans prepared for a pipe factory to cost $100,000.

✚Townley (Picton post office), **N. J.**—(Official)—The contract for the construction of the grain elevator at Townley for Charles Schaefer & Son, 304 Meserole St., Brooklyn, N. Y., has been awarded to the TURNER CONSTRUCTION CO., 11 Broadway, New York. Hooper & Co., 118 Market St., Newark, N. J., are the Archs.

Philadelphia, Penn.—The Linde Air Products Co. plans to erect a plant at 18th and Cambria Sts.

✚The contract for the construction of the two-story brick factory for the Hess Bright Mfg. Co. has been awarded to HARRISON C. REA CO., Philadelphia, Penn. Noted Oct. 15.

✚The contract for the construction of the eight-story brick and concrete factory at 22d and Market Sts., for E. M. Harris, has been awarded to WILLIAM STEELE & SONS CO., Philadelphia. The estimated cost is $275,000.

Reading, Penn.—J. Earl Hickman, Arch., 119 South Fifth St., has prepared plans for the three-story, 37x100-ft. factory for A. W. Arnold. The estimated cost is $15,000.

Wilkes-Barre, Penn.—Sturtevant & Poggi, Archs., Wilkes-Barre, have prepared plans for the construction of colliery shops for the Lehigh & Wilkes-Barre Coal Co. The estimated cost is $500,000.

Cumberland, Md.—The Builders' Supply Co. will erect a three-story brick and reinforced-concrete warehouse. The estimated cost is $20,000.

✚Winston-Salem, N. C.—The contract for the construction of the building for the Hanes Knitting Co. has been awarded to the FOGLE BROS. CO., Winston-Salem.

✚Whitney, S. C.—The Whitney Mfg. Co., Whitney, S. C., has awarded the contract for the construction of a three-story mill at Whitney to the JORDAN MUNN CONSTRUCTION CO., Greenville, S. C. The estimated cost is $40,000.

Cleveland, Ohio—Williard Hirsh, Arch., 1302 Swetland Bldg., is preparing plans for the construction of a two-story factory for the Labor Ice Cream Co., Quinby Bldg. Estimated cost, $40,000.

Donaldson & Meier, Archs., Penobscot Bldg., Detroit, Mich., have completed the plans for the construction of a 30x104-ft. four story and basement factory, for the Otis Elevator Co., 520 Leader News Bldg. Estimated cost, $60,000.

✚Springfield, Ohio—The contract for the construction of a five-story factory has been awarded to the CONCRETE STEEL CONSTRUCTION CO. by E. L. Shuey. Estimated cost, $115,000. Noted Aug. 27.

Gary, Ind.—The Gary Brick & Tile Co. contemplates erecting a plant, the first unit of which will cost $50,000. Frank Enwecke is interested.

✚The contract for the construction of a three-story factory, 247x248 ft., for the Detroit Creamery Co., Grand River and Cass Ave., has been awarded to MAX BARTHOLOMAEI, 466 Warren Ave., East Detroit. Estimated cost, $100,000.

✚Pontiac, Mich.—The general contract for the construction of the five-story storage plant at Pontiac, for Henry P. Gauser, has been awarded to HERTY BROS.

✚Blue Island, Ill.—The contract for the construction of the grain elevator for John C. Klein, 292 Vermont St., has been awarded to the BURRELL ENGINEERING & CONSTRUCTION CO., 327 South LaSalle St.

Chicago, Ill.—Riddle & Riddle, Archs., 122 South Michigan Ave., are receiving bids for the construction of a one-story garage, 70x142 ft., for the Wildmaier Garage Co., 1169 East 55th St. The estimated cost is $12,000.

Elgin, Ill.—Bids will be received about Oct. 20, by Postle & Fisher, Archs., Marquette Bldg., 140 South Dearborn St., for the construction of a two-story factory for the Borden's Condensed Milk Co. The estimated cost is $10,000.

Milwaukee, Wis.—The Harley- Davidson Motorcycle Co. contemplates the construction of a factory addition on 37th and Chestnut Sts. Estimated cost, $18,000.

St. Louis, Mo.—Plans are being prepared by F. C. Bonsack, 815 Pierce Bldg., for a two-story 152x200-ft. storage and stable building for the Columbia Transfer Co. The estimated cost is $50,000.

Plans have been prepared by J. M. Dunham Co., Archs., 1011 Chemical Bldg., for the construction of a seven-story and basement, 83x100-ft. factory, for the J. L. Howard Estate. Estimated cost, $75,000.

✚Portland, Ore.—The contract for the construction of a one-story warehouse, 200x200 ft., for the Public Docks Commission, has been awarded to ANTON TELLER. Estimated cost, $30,600.

Agnew, Calif.—The Pacific Chemical Co., Berkeley, Calif., is having plans prepared by William Binder, Arch., San José, Calif., for a group of factory buildings at Agnew, estimated to cost $60,000.

✚Pomona, Calif.—The contract for the construction of an ice plant has been awarded to F. L. SOMERS, for the La Verne Orange Growers' Association. Estimated cost, $50,000.

FEDERAL GOVERNMENT WORK

The following allotments have been made from the river and harbor act of Oct. 2, 1914, appropriating $20,000,000 for preservation and maintenance of existing river and harbor works, and for the prosecution of projects heretofore authorized.

Portland Harbor, Maine, $105,000; Isles of Shoals Harbor, Maine, $5000; Salem Harbor, Mass., $7500; Boston Harbor, Mass., $200,000; Stonington Harbor, Conn., $6000; New Haven Harbor, Conn., $86,000; Housatonic River, Conn., $1000; Thames River, Conn., $5000.

Port Chester Harbor, N. Y., $10,000; Mamaroneck Harbor, N. Y., $3000; Gowanus Bay, N. Y., Bay Ridge and Red Hook Channels, $150,000; Hudson River Channel, New York Harbor, $125,000; Charlotte Harbor, N. Y., $24,000; East Chester Creek, N. Y., $20,000; Westchester Creek, N. Y., $36,500; Harlem River, N. Y., $50,000; Hudson River, N. Y., $750,000; Staten Island Sound, N. Y. and N. J., $400,000; Raritan Bay, N. J., $20,000; Newark Bay and Passaic Bay, N. J., $150,000; Woodbridge Creek, N. J., $6000; Keyport Harbor, Matawan Creek, Raritan, South, and Elizabeth Rivers, Shoal Harbor and Compton Creek, and Cheesequake Creek, N. J., $8000; Shrewsbury River, N. J., $10,000; Absecon Inlet, N. J., $25,000.

Delaware River below Philadelphia, Penn., $1,000,000; Wilmington Harbor, Del., $30,000; Pittsburgh Harbor, Penn., $2500; Waterway from Chincoteague Bay, Va., to Delaware Bay, Del., $1000.

Potomac River at Washington, D. C., $10,000; Mattaponi and Pamunkey Rivers, Va., $4000; Rappahannock River, Va., $5000; Beaufort Harbor, N. C., $5000; Beaufort Inlet, N. C., $10,000; Fishing Creek, N. C., $1000; Pamlico and Tar Rivers, N. C., $18,500; Bay River, N. C., $1000; Contentnea Creek, N. C., $2000; Meuse River, N. C., $25,000; Swift Creek, N. C., $500; Waterway from Pamlico Sound to Beaufort Inlet, N. C., $3400; New River, N. C., including inland waterways between Beaufort Harbor and New River and between New River and Swansboro, $16,000; Northeast, Black, and Cape Fear (above Wilmington) Rivers, N. C., $10,500; Cape Fear River above Wilmington, N. C., locks and dams, $70,000; Cape Fear River at and below Wilmington, N. C., $115,000; Charleston Harbor, S. C., Ashley River Channel, $15,000; Winyah Bay, S. C., $15,000; Great Peddee River, S. C., $10,000; Santee, Wateree and Congaree Rivers, S. C., $30,000.

Savannah Harbor, Ga., $150,000; Brunswick Harbor, Ga., $25,000; Savannah River, below Augusta, Ga., $15,000; Altamaha, Oconee and Ocmulgee Rivers, Ga., $40,000; Flint River, Ga., $18,000; Chattahoochee River, below Columbus, Ga., $65,000; Coosa River, Ga., and Ala.: Lock in dam No. 4 and dam No. 5, $30,000; lock and dam at Mayos Bar, near Rome, Ga., $10,000; Tampa Bay, Fla., $6000; St. Petersburg Harbor, Fla., $1500; Apalachicola Bay, Fla., $15,000; St. Andrews Bay, Fla., $36,000; Narrows in Santa Rosa Sound, Fla., $5000; St. Johns River, Fla.: Jacksonville to the ocean, $200,000; Jacksonville to Palatka, $5000; Palatka to Lake Harney, $5000; Indian River, Fla., $10,000; Caloosahatchee River, Fla., $2000; Withlacoochee River, Fla., $10,000; Apalachicola River, Fla., including cutoff, Lee Slough, lower Chipola River, and upper Chipola River from Marianna to its mouth, $15,000; Channel from Clearwater Harbor to Tampa Bay, Fla., $12,000; Channel from Apalachicola River to St. Andrews Bay, Fla., $65,000; Choctawhatchee River, Fla., and Ala., $20,000; Escambia and Conecuh Rivers, Fla. and Ala., $5000; removing the water hyacinth in Fla., Miss., La., and Tex., $17,000.

Mobile Harbor, Ala., $62,500; Mobile Bar, Ala., $10,000; Alabama River, Ala., including Coosa River up to Wetumpka, $50,000; Black Warrior, and Tombigbee Rivers, Ala., olis, Ala., $9000; Demopolis, Ala., to Walkers Bridge, Miss., $9000; Gulfport Harbor and Ship Island Pass, Miss., $30,000; Pascagonla, Leaf and Chickasahay Rivers, Miss., $4000; Yazoo River and tributaries, Miss., including Yazoo, Tallahatchie, Big Sunflower and Coldwater Rivers, Tallahatchie River above the mouth of Coldwater River, Tchula Lake, Steele and Washington Bayous, Lake Washington, and Bear Creek, $30,000; Big Sunflower River, Miss., lock and dam, $90,000; Southwest Pass, Mississippi River, $300,000; Bayou Teche, La., $30,000; Bayou Vermilion and Mermentau River, La., and tributaries including Bayou Plaquemine Brule, $12,000; Bayou Terrebonne, La., $25,000; Atchafalaya River, below Morgan City, La., $10,000; Bayou Grossetete, La., $9000.

Galveston Harbor, Tex., $25,000; channel from Galveston Harbor to Texas City, Tex., $25,000; Port Bolivar Channel, Tex., $15,000; Port Aransas, Tex., $470,000; Sabine Pass, Tex., $240,000; Houston Ship Channel, Tex., $10,000; Anahuac Channel, mouth of Trinity River, Oyster Creek, and Cedar, Chocolate, Turtle, Bastrop, Dickinson, Double, and East Bay Bayous, Tex., $25,000; Inland waterway on coast of Texas: West Galveston Bay-Brazos River section, $15,000; Brazos River-Matagorda Bay section, $20,000; Aransas Pass-Pass Cavallo section, $25,000; Guadalupe River, including bay section and river up to Victoria, Tex., $15,000; Brazos River at the mouth, Tex., $20,000; Brazos River, Tex.: Velasco to Old Washington, $10,000; Old Washington to Waco, $200,000; Channel from Aransas Pass to Corpus Christi, Tex., $10,000; Trinity River, Tex.: Open-channel work, $15,000; locks and dams, $188,000; Cypress Bayou, La., and Tex., $2000.

Red River above Fulton, Ark., $15,000; Red River below Fulton, Ark., $30,000; Ouachita River, Ark. and La.: Open-channel work, $20,000; locks and dams, $300,000; Arkansas River, Ark. and Okla., $46,000; White River, Ark., $10,000; Cache River, Ark., $1750; Black and Current Rivers, Ark. and Mo., $17,100; St. Francis and L'Anguille Rivers and Blackfish Bayou, Ark., $1000.

Tennessee River: Between Florence and Riverton, Ala., $110,000; below Riverton, Ala., $123,000; Cumberland River below Nashville, Tenn., $210,000; Toledo Harbor, Ohio, $135,000; Port Clinton Harbor, Ohio, $500; Huron Harbor, Ohio, $12,000; Vermillion Harbor, Ohio, $3000; Cleveland Harbor, Ohio, $150,000; Conneaut Harbor, Ohio, $243,530.

Ohio River: Open-channel work, $19,000; locks and dams, $1,750,000; Ontonagon Harbor, Mich., $10,000; St. Joseph Harbor, Mich., $3000; South Haven Harbor, Mich., $4500; Muskegon Harbor, Mich., $4500; Ludington Harbor, Mich., $6000; Frankfort Harbor, Mich., $4000; Charlevoix Harbor, Mich., $2000; waterway across Keweenaw Point, Mich., harbor of refuge, $75,000; Ashland Harbor, Wis., $10,000; Racine Harbor, Wis., $3000; Fox River, Wis., $10,000; Warroad Harbor, Minn., $2000; Zipple Bay, Lake of the Woods, Minn., $1000; Agate Bay, Minn., $5000; Chicago River, Ill., $10,000; Calumet River, Ill., $10,000; Michigan City Harbor, Ind., $50,000.

Mississippi River: Head of passes to Ohio River (work of Mississippi River Commission), $3,750,000; Ohio River to Missouri River, $250,000; Missouri River to Minneapolis, Minn., $800,000; St. Paul to Minneapolis, Minn., $150,000; Brainerd to Grand Rapids, Minn., $4000; Missouri River: Kansas City to the mouth, $850,000; Kansas City to Sioux City, $50,000; Sioux City to Fort Benton, $50,000; Gasconade River, Mo., $15,000.

Los Angeles Harbor, Calif., $42,000; Oakland Harbor, Calif., $98,000; Humboldt Harbor and Bay, Calif., $200,000; Sacramento and Feather Rivers, Calif. (work of the California Débris Commission), $60,000; Coos Bay, Ore., $70,000; Coquille River, Ore., $26,000; Siuslaw River, Ore., $5000; Snake River, Ore., Wash., and Idaho, $5000; Columbia River and tributaries above Celilo Falls to the mouth of Snake River, Ore., and Wash., $10,000; Columbia River, between the foot of the Dalles Rapids and the head of Celilo Falls, Ore., and Wash., $525,000; Willamette and Yamhill Rivers above Portland, Ore., $25,500; Columbia and lower Willamette Rivers below Portland, Ore., $200,000; Columbia River at the mouth, Ore. and Wash., $1,000,000; Grays Harbor and Chehalis River, Wash., $15,000; Grays Harbor and Bar, Wash., $110,000; Columbia River, between Bridgeport and Kettle Falls, Wash., $35,000; Cowlitz and Lewis Rivers, Wash., $6000.

Reserved for contingencies, $995,220.

Elevators—Bangor, Maine—Bids will be received by Oscar T. Wenderoth, Superv. Arch., Washington, D. C., until 3 p.m., Nov. 9, for installing an electric passenger elevator and a hydraulic freight lift in the U. S. post office at Bangor.

✚Concrete Coal Pocket—Fort Williams (Cape Cottage post office), Maine—The contract for the construction of a concrete coal pocket at Fort Williams has been awarded to the SAUNDERS CONTRACTING CO., Portland, Maine, at $8253. Noted Sept. 24.

Storehouse—Portsmouth, N. H.—The Quartermaster-General has directed the Constructing Quartermaster at Fort Constitution, N. H., to prepare plans and call for bids for the construction of a storehouse at Portsmouth.

Headstones—Boston, Mass.—Bids were received by Lieut.-Col. W. S. Wood, Depot Quartermaster, for furnishing 12,000 white marble headstones from W. H. Gross & W. H. Deely, Lee, Mass., at $2.48 per stone, and the Vermont Marble Co., Proctor, Vt., at $2.56 per stone. Noted Sept. 24.

★Dredging Plant for Hire—Boston, Mass.—(Official)—Bids will be received by Lieut.-Col. W. E. Craighill, U. S. Engineers' Office, Boston, until noon, Oct. 30, for hire of dredging plant in Boston Harbor.

Shipbuilding Cranes—Boston, Mass.—The following are the bids received by H. R. Stanford, Chief, Bureau of Yards and Docks, for constructing shipbuilding cranes at the U. S. Navy Yards, Boston, and Philadelphia, Penn.: (a) For four cranes delivered f.o.b. cars, U. S. Navy Yard, Boston, Mass., (b) for four cranes delivered f.o.b. cars, U. S. Navy Yard, Philadelphia: Cleveland Crane & Engineering Co., Wickliff, Ohio, (a) $37,860, (b) $37,860; Wellman-Seaver-Morgan Co., 7000 Central Ave., Cleveland, (a) $41,916, (b) $41,584; Niles-Bement-Pond Co., New York, N. Y., (a) $29,860, (b) $29,440; Orton & Steinbrenner Co., Chicago, Ill., (a) $19,784 and $16,430, (b) $19,776 and $16,331; American Hoist & Derrick Co., 63 South Roberts St., St. Paul, Minn., (a) $19,916, $19,316, $20,824 and $20,824, (b) $19,756, $19,156, $20,664 and $20,664; Morgan Engineering Co., Alliance, O., (a) $29,750, (b) $29,575; Whiting Foundry Equipment Co., Harvey, Ill., (a) $24,618, (b) $24,430; Terry & Tench Co., Grand Central Terminal, New York, Boston cranes, $38,350, erected, $52,168; Philadelphia, $37,950, erected, $50,268; McMyler Interstate Co., Bedford, Ohio, (a) $24,920 and $23,040, (b) $24,740 and $22,860. Noted Sept. 24.

Mezzanine Floor—Worcester, Mass.—The following bids were received by the Custodian, U. S. post office, Worcester, for constructing a mezzanine floor in the post office: E. J. Cross Co., 82 Foster St., Worcester, $10,742; James Mills & Sons Co., 4 Walnut St., Worcester, $8287; C. W. Humphreville Construction Co., Westfield, Mass., $8742; J. W. Bishop Co., 109 Foster St., Worcester, $9543; Norcross Bros. Co., Worcester, $9761; Ernest Whitehead, 8 Norwich St., Worcester, $10,040; Central Building Co., Worcester, Mass., $10,300.

Lighting System—Newport, R. I.—Bids will be received by H. R. Stanford, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a.m., Oct. 31, for installing a street-lighting system at the naval hospital, Newport.

✚Switchboard, Wiring, Etc.—New York, N. Y.—(Borough of Manhattan)—The contract for installing a new main switchboard, basement floor, new conduit, wiring, electric fixtures and panel board in the U. S. subtreasury, New York, has been awarded to THOMPSON-BONNY CO., 45 York St. (Borough of Brooklyn), New York, N. Y., at $5125.

Iron—New York, N. Y.—(Borough of Richmond)—Bids will be received by the Light House Inspector, Tompkinsville, until 2 p.m., Oct. 26, for furnishing and delivering at Tompkinsville, about 40,000 lb. of round, square and flat iron.

Piers, Ferry Rack, Bridge, Etc.—New York, N. Y.—The following bids were received by Oscar Wenderoth, Superv. Arch., Washington, D. C., for constructing new dock piers and ferry rack bridge: (a) for the construction of ferry rack bridge, gallows frame, lifting mechanism and all appurtenances for piers A and C, (b) for construction of pier B—Snare & Triest Co., New York, N. Y., (a) $86,400, (b) $26,700; Howard H. Peterson & Co., New York, N. Y., (a) $91,747, (b) $27,600; Stillman, Dehanty & Ferris Co., Jersey City, N. J., (a) $83,621, (b) $29,100; Northeastern Construction Co., New York, N. Y., (a) $77,369, (b) $25,030; Bonacci Contracting Co., New York, N. Y., (a) $85,740, (b) $29,500; the Phœnix Construction Co., New York, N. Y., (a) $76,397, (b) $23,500. Noted Sept. 24.

✚Sheet Metal Work—New York, N. Y.—The contract for replacing the old c.-i. roof with sheet metal on the U. S. Court House and Post Office, New York, has been awarded to NEPTUNE B. SMYTH, 43 East 34th St., New York, N. Y., at $24,893. Noted Sept. 24 and Oct. 1.

✚Post Office—Port Jervis, N. Y.—The contract for constructing the post office at Port Jervis has been awarded to JOSEPH DI BENEDETTO, 423 East 115th St., New York, N. Y., at $47,329. Noted Aug. 6 and Sept. 17.

Post Office—Morristown, N. J.—Bids will be received until 3 p.m., Dec. 5, by Oscar T. Wenderoth, Superv. Arch., Washington, D. C., for constructing a post office at Morristown. The building will be two stories and basement, of brick and marble.

Dredging—Tuckerton, N. J.—Bids received by Maj. E. N. Johnson, Corps Engrs., U. S. A., Wilmington, Del., for dredging in Tuckerton Creek have been rejected. New bids for the work will soon be called.

Shipbuilding Cranes—Philadelphia, Penn.—See item under Boston, Mass. Noted Sept. 24.

✚Lock Gates—Pittsburgh, Penn.—The contract for furnishing and erecting steel lock gates, valves and lock-operating machinery at Lock 4, Monongahela River, has been awarded as follows: Sect. A, H. P. GAZZAM, Pittsburgh, $7289; Sect. B, UNION FOUNDRY & MACHINE CO., Pittsburgh, $13,809. Noted Sept. 10 and Oct. 15.

Pipe, Sand, Gravel and Cement—Washington, D. C.—Bids will be received by the Depot Quartermaster, U. S. Army, Washington, D. C., for furnishing 125 tons of gravel, 75 tons of sand, 80 bbl. portland cement and 750 ft. terra cotta pipe.

Motor Trucks—Washington, D. C.—Bids will be received by the Depot Quartermaster, U. S. Army, Washington, D. C., until 11 a.m., Oct. 24, for furnishing two four-wheel drive motor trucks. J. B. Houston is Lieut.-Col. Quartermaster Corps.

★Rewiring—Washington, D. C.—(Official)—Bids will be received, until 2 p.m., Nov. 21, by the Secretary of the Interior, Washington, D. C., for rewiring the first floor and basement of the Patent Office Bldg. B. Sweeney is Asst. Secy.

★Bridge—Washington, D. C.—(Official)—Bids will be received by the Secretary, Board of Commissioners, District Bldg., Washington, until 2 p.m., Nov. 17, for the construction of a reinforced-concrete arch bridge across Rock Creek Valley. For further information see advertisement under "Contracts to Be Let."

Life Saving Station—Lillington, N. C.—Bids were received by S. I. Kimball, Gen. Supt., Life Saving Service, Washington, D. C., for constructing the life saving station at Cape Fear, N. C., from E. Hart, Norfolk, Va., $9680, and A. J. Robbins, Southport, N. C., $8671. Noted Oct. 8.

Plastering Material—Atlanta, Ga.—Bids will be received by F. H. Duehay, Supt. of Prisons, Dept. of Justice, Washington, D. C., until 10 a.m., Oct. 23, for furnishing and delivering at the U. S. penitentiary, Atlanta, plastering material to be used in the construction of hospital building.

Rock—Greenville, Miss.—See item under "New Orleans, La."

Rock—New Orleans, La.—Bids will be received until 11 a.m., Oct. 26, by Maj. W. G. Caples, Q. & C. Bldg., New Orleans, for furnishing and delivering 40,000 tons of rock on the Mississippi River, between Greenville, Miss., and New Orleans, La.

✚★Stone—New Orleans, La.—The contract for furnishing about 65,000 tons of stone, to be placed on the jetties at Southwest Pass, Mississippi River, has been awarded to L. ALEXANDER, at $381,550. Noted Sept. 17.

Post Office—Jellico, Tenn.—Bids were received as follows by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post office building at Jellico, (a) limestone, (b) sandstone, (c) Tennessee marble, (d) other marble, (e) Kentucky limestone: Volney E. Taylor, Huntington, W. Va., (a) $58,385, (d) $69,295; Westchester Engineering Co., White Plains, N. Y., (a) $59,126, (b) $63,000, (c) $73,000, (d) $72,000, (e) $64,000; William H. Fissell & Co., New York, N. Y., (a) $59,700, (b) $62,700, (d) $72,540, (e) $61,468; J. L. Crouse, Greensboro, N. C., (a) $61,998, (b) $63,400, (c) $78,552, (d) $73,302; George W. Stiles Construction Co., Chicago, Ill., (a) $63,861, (d) $75,661, (e) $65,361; William O'Neill & Co., Faribault, Minn., (a) $64,319, (c) $77,781, (d) $75,136; James De Vault, Canton, Ohio, (a) $64,579, (b) $66,000, (d) $75,337; M. Yeager & Son, Danville, Ill., (a) $67,475, (b) $69,975, (c) $76,975, (d) $76,975; Longest & Tessier Co., Greensboro, N. C., (a) $68,800, (b) $68,800, (c) $78,800, (d) $79,500; George A. Clayton, Atlanta, Ga., (a) $74,244, (d) $80,481; Paradis Construction Co., Louisville, Ky., (a) $78,000, (b) $79,000, (c) $84,300, (d) $88,100. Noted Sept. 10.

Post Office—Shelbyville, Tenn.—The following bids were received by Oscar Wenderoth, Superv. Arch., Washington, D. C., for constructing the post office at Shelbyville: Longest & Tessier Co., Greensboro, N. C., $53,900; Voeney E. Taylor, Huntington, W. Va., $45,480; J. L. Crouse, Greensboro, N. C., $53,195; William O'Neil & Son Co., Faribault, Minn., $56,758. Noted Sept. 10.

Improving Post Office and Court House—Detroit, Mich.—Bids will be received by Oscar T. Wenderoth, Washington, D. C., until 3 p.m., Nov. 25, for extending and remodeling the U. S. post office and court house.

★Dredging—Chicago, Ill.—(Official)—Bids will be received by Lieut.-Col. W. V. Judson, 508 Federal Bldg., Chicago, until 10 a.m., Nov. 13, for dredging in the Chicago River, Ill.

Conduit and Cable System—Minneapolis, Minn.—Bids will be received by Oscar Wenderoth, Superv. Arch., Washington, D. C., until 3 p.m., Nov. 3, for the construction of an underground conduit and cable system for lighting, power and telephone service between the present U. S. court house and post office and the new post office building.

✚Post Office—Amarillo, Tex.—The contract for the construction of the post office at Amarillo has been awarded to M. YEAGER & SON, Danville, Ill. Noted Aug. 27 and Oct. 8.

Water System—El Paso, Tex.—The Constructing Quartermaster, El Paso, has been directed to advertise for bids for the extension of the water system.

Buildings—Fort Bliss, Tex.—The Constructing Quartermaster, El Paso, has been directed to advertise for bids for constructing new buildings at Fort Bliss.

Post Office—Uvalde, Tex.—Bids were received by Oscar Wenderoth, Superv. Arch., Washington, D. C., for constructing the post office at Uvalde, from the Dieter & Wenzel Construction Co., Wichita, Kan., at $64,113, and George Hinchliff Co., Security Bldg., Chicago, Ill., at $56,400. Noted Aug. 20.

Post Office—El Reno, Okla.—Bids will be received by Oscar Wenderoth, Superv. Arch., Washington, D. C., until 3 p.m., Nov. 24, for constructing a post office at El Reno. The building will be two stories and basement, of fireproof construction.

Sewer System—Lawton, Okla.—Bids will be received by the Secretary, Department of the Interior, until 2 p.m., Nov. 7, for constructing a storm water sewer for the north addition of the city. B. Sweeney is Assist. Secy.

★**Steel Rolling Crest**—Grand Valley, Colo.—Bids will be received at the office of the U. S. Reclamation Service, Washington, D. C., until 2 p.m., Nov. 19, for furnishing one steel rolling crest for the Grand River Diversion Dam, Grand Valley Project, Colorado, consisting of six 70x10-ft. 3-in. rollers and one 60x15-ft. 4-in. roller and accessories, involving a total weight of about 550,000 lb.

Water Heater—Las Animas, Colo.—All bids received Oct. 3, by H. R. Stanford, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C., for installing a feed water heater at the naval hospital, Las Animas, have been rejected. The specifications will be revised and the work readvertised. Noted Sept. 17.

Drainage—Roswell, N. M.—Press reports state that R. A. Hart, Drainage Engr., Salt Lake City, Utah, has reported in favor of draining 40,000 acres of land in Pecos Valley.

Timber Wharf, Wharf Shed—Bremerton, Wash.—The following bids were received by H. R. Stanford, Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing the timber wharf and wharf shed at the naval torpedo station, Puget Sound: Erickson & Larson, Seattle, Wash., $8493; J. L. Murphy & Son, Tacoma, Wash., $9198; Fleines & Eahl, Seattle, $6989; Charles H. Schaar, Seattle, $8580; J. A. McEachern, Seattle, $10,048; P. Manson, Dockton, Wash., $7000. Noted Sept. 24.

Coal Platform and Flume—San Diego, Calif.—Bids were received by H. R. Stanford, Chief, Bureau of Yards and Docks, Washington, D. C., for making an extension to the coal platform and flume at the naval coal depot, San Diego, from Frederick Steffgen, San Diego, $8215, and Holland Construction Co., San Diego, $9760. Noted Sept. 17.

✚**Lumber**—Honolulu, H. T.—CHARLES NELSON & CO., San Francisco, Calif., have been awarded the contract for furnishing 560,396 ft. of lumber at Honolulu, at $9.80 per M., plus $5.50 for transportation.

Miscellaneous Supplies—Panama—Bids will be received until 10:30 a.m., Oct. 31, by Maj. F. C. Boggs, Gen. Pur. Officer of the Panama Canal, for furnishing, by steamer, free of all charges, on dock at either Colon, Atlantic port, or Port of Ancon, Balboa, Canal Zone, Pacific port, Isthmus of Panama: Steel angles, cold-rolled steel, nails, tacks, sheet copper, sheet zinc, files, hose, electric fuses and cable connections, lamp cord, copper wire, fuse wire, coal tar, chloride of lime, white zinc, white lead, lampblack, aluminum paint, burnt sienna, lard oil, linseed oil, turpentine and varnish.

Structural Steel—Panama—Bids will be received until Oct. 28, by Maj. F. C. Boggs, Gen. Pur. Officer of the Panama Canal, for furnishing 413,945 lb. of structural steel for the freight house at Panama.

Building—San Juan, Porto Rico—The following are the bids received by H. R. Stanford, Chief, Bureau of Yards and Docks, for constructing the radio building and chief operators' quarters at the naval radio station, San Juan: Henry Monk, Pensacola, Fla., $16,400; P. J. Carlin Construction Co., 1123 Broadway, New York, N. Y., $24,351; Thomas Sampson, San Juan, P. R., $18,299; A. Guerini, San Juan, $6150; Francisco Pons, San Juan, $9500. Noted Sept. 3.

MISCELLANEOUS

✚**Seawall and Filling**—Boston, Mass.—The following bids were received for the construction of the seawall across the water passageway on northerly line of East First St.; also for furnishing 8500 cu.yd. of filling: JOHN CASHMAN & SONS CO., $13,025 (awarded contract); H. P. Converse & Co., $14,700; George T. Rendle Co., $15,125; Hugh Nawn Contracting Co., $15,625; Coleman Bros., $15,800; McCarthy & Walsh, $15,950; J. P. O'Riorden, $17,265; W. H. Ellis & Son Co., $17,370; Lawler Bros., $17,517; William L. Miller Co., $18,820; John P. Cavanagh, $19,750. L. K. Rourke is the Comr. of Pub. Wks.

✚**Fire Station**—Taunton, Mass.—The contract for the construction of the two-story fire station on Oak St., has been awarded to FRANKLIN D. WILLIAMS, 50 Wier St., Taunton. G. L. Smith is the Arch.

Quay Wall—Pawtucket, R. I.—The Board of Harbor Commissioners has granted permission to the Harbor Improvement Commission to have plans prepared and call for bids for the construction of a 700-ft. quay-wall in Pawtucket.

★**Hardware**—Bedford Hills, N. Y.—(Official)—Bids will be received until Oct. 23, for furnishing the finishing hardware for six cottages and the hospital at the New York State Reformatory for Women, Bedford Hills, N. Y. Specifications may be secured at the New York Office of the Department of Architecture, Room 1224, Woolworth Bldg., New York. For details, see advertisement under "Contracts to Be Let."

★**Poultry Plant Extensions**—Ithaca, N. Y.—Bids will be received by E. L. Williams, Treas., Cornell University, Ithaca, N. Y., until Nov. 5, for the construction of poultry plant extensions, including layer and brooder houses, exhibition building, fattening and feed houses, heating, plumbing and electricity work, at the New York State Agricultural College, Cornell University. For details, see advertisement under "Contracts to Be Let."

✚**Loading Platform**—New York, N. Y.—(Borough of Manhattan)—(Official)—The contract for the construction of a covered dumping board and ramp between 77th and 78th St., North River, has been awarded to the RIVERSIDE CONTRACTING CO., 39 Cortlandt St., New York, at about $38,000. Noted Oct. 8.

✚**Roof Repairs**—New York, N. Y.—(Borough of Manhattan)—(Official)—The contract for laying new tin roof and repairing slate and metal work on the Metropolitan Hospital, Blackwell's Island, has been awarded to the QUALITY SHEET METAL WORKS. The contract for the same work on the T & S Bldg. has been awarded to the ANCHOR CORRUGATING CONSTRUCTION CO. Noted Oct. 1.

✚**Subway**—New York, N. Y.—(Borough of Manhattan)—(Official)—The Public Service Commission has awarded the contract for the construction of Route 1, Section 48 of the subway system to F. L. CRANFORD INC., at $1,571,363. List of bidders noted Oct. 15.

★**Jetties**—Asbury Park, N. J.—The Public Grounds Commission will receive bids, until Nov. 4, for the construction of jetties on the beach at Asbury Park, N. J. W. P. Sherman is Secy. For details, see advertisement under "Contracts to Be Let."

★**Road Work**—Camden, N. J.—(Official)—Bids will be received by the Road Committee, until 10 a.m., Nov. 11, for constructing a number of roads. For details, see advertisement under "Contracts to Be Let." J. J. Albertson is County Engr.

Barn—Paterson, N. J.—The city will receive bids soon for the construction of a two-story, 32x102-ft. barn. The estimated cost is $10,000.

★**Sewage Ejector**—Red Bank, N. J.—(Official)—Bids will be received by the Borough Clerk, until 8 p.m., Nov. 2, for constructing a sewage ejector. Geo. D. Cooper, 60 Broad St., Red Bank, is Engr.

Market—Bristol, Penn.—M. J. Hill, Gen. Mgr., Trenton Market, has acquired a site at Mill and Bath St. Plans are being prepared for the construction of a market for local farmers.

Overhead Crossing—Philadelphia, Penn.—The application of the city for an overhead crossing for the tracks of the Philadelphia & Reading R.R. at Tulip and Emerald St., has been approved by the Public Service Commission at Harrisburg.

★**Air Compressors and Water Turbine**—Pittsburgh, Penn.—(Official)—Bids will be received by the U. S. Engineer Office, until noon, Nov. 21, for installing two air compressors and one water turbine complete, at Lock No. 2, Monongahela River. Francis R. Shunk is Lt.-Col.

Comfort Station—Scranton, Penn.—The following bids were received by Mayor Jermyn for the construction of a comfort station: F. E. Sykes & Co., $19,571; E. S. Williams, $20,188; Peter Stipp & Sons, $20,643; Ludwig T. Stipp, $20,791; Williams & Richardson, $20,917; Matthias Stipp, $22,892. Noted Sept. 24.

★**Sewers**—Washington, D. C.—(Official)—Bids will be received by the Commissioners, until 2 p.m., Oct. 20, for constructing sewers in the District of Columbia. For details, see advertisement under "Contracts to Be Let."

★**Sewer**—Norfolk, Va.—(Official)—Bids will be received by the Board of Control, until 1 p.m., Oct. 29, for laying sewer and water pipes o nArmistead Bridge Road, West Ghent Blvd., Harrinton, Gates, Brandon, Spottswood and Shirley Ave. W. H. Taylor, Jr., is Asst. City Engr.

Foundation and Pumping Station—Charlotte, N. C.—Bids will be received until Oct. 26, by the Morris Machine Works, Charlotte, for excavation, piling, and constructing foundation and pumping station for the Lake Matamuskeet Drainage District, Hyde County, N. C.

✚**Drainage**—Jackson, Tenn.—The contract for the construction of 15 mi. of drainage canal and laterals in Drainage District No. 3 has been awarded to D. W. ROBBINS, Tupelo, at about $60,000. A. W. Stovall is the Chmn. Noted July 16, Sept. 24.

★**Levee Work**—Memphis, Tenn.—(Official)—Bids will be received by the Mississippi River Commission, First and Second Districts, Rm. 20, Custom House, Memphis, until 11 a.m., Nov. 2, for constructing 3,341,000 cu.yd. of levee work. E. M. Markham is Maj.

Steel Dump Cars—Chicago, Ill.—Bids will be received until Oct. 23, by the Commissioner of Public Works, for 200 steel dump cars for use in the construction of the Wilson Ave. water tunnel.

Drainage—Watseka, Ill.—Bids will be received, until Oct. 24, by Martinton Drainage District No. 4, for excavating 14,500 ft. of main open ditch and two laterals; also for 2413 ft. of 18-in. and 1120 ft. of 2-in. tile. C. F. Helman, Paxton, Ill., is the Engr.

Harbor Improvements—Milwaukee, Wis.—The Harbor Commission, in conjunction with the Chicago, Milwaukee & St. Paul Ry. Co., has made arrangements for the widening of the Menominee River. The plans will soon be submitted to the Common Council for ratification.

✚**Drainage**—Algona, Iowa—The Board of Supervisors has awarded the following contracts for the construction of drainage ditches: Drain 105, west of Sexton, ARTHUR McHOSE, Boone, at $43,700; Drain 99, JOHN NORDSTRUM, at $35,123; Drain 106, LONGLEY & HELBERG, at $4480. Noted Sept. 10.

Drainage—Clarion, Iowa—Bids will be received until Oct. 26, by the County Auditor for constructing drain No. 108; 28,550 ft. of 8- to 26-in. tile will be required.

✚**Dredging**—Knoxville, Iowa—The contract for dredging the channel in Skunk River has been awarded to the LANA CONSTRUCTION CO., Council Bluffs, Iowa, at 7.4c. per cu.yd. Approximately 350,000 cu.yd. are to be removed. W. O. Price is the Engr.

Metal Furniture, Fixtures and Equipment—Flandreau, S. D.—(Official)—Bids will be received, until Nov. 17, by George A. Chorpening, County Audr., Flandreau, S. D., for furnish-

ing and installing metal and wooden furniture, fixtures and equipment in the Moody County Court House. Plans are on file at the office of the County Auditor and Joseph Schwarz, Arch., Sioux Falls.

Diverting Channel—Kalispell, Mont.—The County Commissioners, Flathead County, have engaged W. W. Pennington, Butte, to prepare estimate of the cost of changing the channel of Flathead River above the steel bridge. If cost is satisfactory, a special election will be called to vote a bond issue.

Ditch and Flume—Missoula, Mont.—Bids will be received by S. H. Ketcham, Engr., 220 Higgins Ave., Missoula, for constructing 1200 ft. of flume and three miles of 3-ft. ditch near Iron Mountain.

✚Drainage—Wynne, Ark.—The entire contract for the construction of a drainage system in Drainage District No. 3 has been awarded by the Commissioners to S. COLEMAN & SONS, Paragould, at $192,000. The contract calls for 2,325,000 cu.yd. of excavation and ditching over a territory of 75 miles; 900 ft. of corrugated iron culvert pipe; 15 iron bridges with concrete abutments. Noted Oct. 8.

Park Improvement—Beaumont, Tex.—Competitive plans, specifications and estimates, are reported to be desired by the Board of Park Commissioners until Nov. 2, for raising grade and improving Island Park, including bridge across Brakes' Bayou.

★Carts, Cans and Street Sweepers—San Antonio, Tex.—The city of San Antonio will receive bids, until Nov. 9, for furnishing carts for carrying demountable cans, cans and modern street sweepers. Ray Mackey is City Pur. Agt. For details, see advertisement under "Contracts to Be Let."

Drainage—Tempe, Ariz.—A drainage district has been organized by the owners of about 3000 acres of land near here. Bonds will be issued soon for the construction of a drainage system.

Motor Fire Apparatus—Seattle, Wash.—The following bids were received by the Board of Public Works for furnishing the fire department with three combination chemical and hose motor trucks: White Co., $16,905; Gorham Fire Apparatus Co., $17,490; Robinson Fire Apparatus Co., $18,000; A. G. Long, $18,000; Nott, Joslyn & Co., $19,000.

Cement—Seattle, Wash.—The Port of Seattle Commission will receive bids, until Oct. 29, for furnishing 20,000 bbl. of cement.

✚Copper Wire—Seattle, Wash.—The contract for furnishing the city with 165,000 ft. of copper wire has been awarded to W. A. CLARK WIRE CO., at $21,067.

Dredge—Tacoma, Wash.—The two lowest bids received by the Inter County River Improvement Association for furnishing an 18-in. hydraulic dredge for use in the Stuck River, were as follows: Seattle Machine Works, $57,500; Washington Iron Works, $64,000.

Jetty—Vancouver, Wash.—A jetty, 2000 ft. in length, extending from the Oregon shore into the Columbia River, will be constructed at the port of Vancouver. The cost will be paid out of a fund raised by taxing property owners in the port for the past two years. The amount available at the present date is $30,000.

Drainage—Walla Walla, Wash.—J. W. Sweazy, County Audr., will receive bids, until Nov. 2, for the construction of a drainage system in Drainage District No. 2, Walla Walla County. Work will include 10.2 miles of open ditches, construction of several wooden structures and pumping plant.

✚Dock—Portland, Ore.—The Southern Pacific Co. has awarded the contract to the INTERNATIONAL CONSTRUCTION CO., for building an open dock on the west side of Willamette River. The estimated cost is $15,000. H. A. Hampton is the Engr. Noted Oct. 8.

Dredging Bonds—Longbeach, Calif.—At a special election held Oct. 2, $30,000 in bonds were voted to pay for the dredging of the entrance to Longbeach harbor.

Fire Alarm System—Merced, Calif.—The City Trustees have ordered the City Engineer to prepare plans and specifications for a 25-box fire alarm system.

Oil Supply Station—Oakdale, Calif.—The Standard Oil Co. is having plans prepared for the construction of an oil supply station. The estimated cost is $10,000.

Retaining Wall—Sacramento, Calif.—The City Commission has ordered new plans to be prepared for the sheet pile retaining wall to be built in the levee near the swimming baths. The estimated cost is $10,500.

Tunnel—San Francisco, Calif.—(Official)—The Board of Public Works has rejected the bid of Erickson & Petterson for the construction of the Twin Peaks Tunnel because of interlineation. New bids will be received until Oct. 28. The period for completion has been extended from 600 to 1000 days. Noted May 21, June 18, July 9, Sept. 24 and Oct. 15.

✚Piers—San Francisco, Calif.—The Board of State Harbor Commissioners has awarded the following contracts for the construction of piers: (Pier 16) HEALY-TIBBITTS CONSTRUCTION CO., at $108,720; (Pier 18) SAN FRANCISCO BRIDGE CO., at $11,800. Noted Oct. 1.

Breakwater—Kingston, Ont.—The city contemplates the construction of a breakwater estimated to cost about $30,000.

Traveling Crane—Toronto, Ont.—Bids will be received until Oct. 27, by the Mayor, Chmn. of the Bd. of Control, for furnishing an overhead hand-operated traveling crane.

Subway—Weston, Ont.—The Town Council plans to construct a subway estimated to cost $18,000. E. A. James, 57 Adelaide St., is the Engr.

BUILDINGS

✚Portsmouth, N. H.—The contract for the construction of the state armory at Portsmouth has been awarded to SACCO & WOOD. C. R. Whitcher, Manchester, is the Arch.

Brattleboro, Vt.—Bids will soon be received for the construction of a two-story station for the Boston & Maine and Central Vermont railroads. J. M. Morrison, St. Albans, is the Engr.

✚Amherst, Mass.—The contract for the construction of the chapter house for the Delta Kappa Epsilon fraternity has been awarded to the H. WALES LINES CO., at $65,000.

✚Boston, Mass.—The contract for the addition to the City Contagious Hospital has been awarded to JOSEPH M. DOLAN, 197 Sidney St., Cambridge, at $50,000.

✚Boston, Mass.—The contract for the construction of the 11-story hotel at Washington and Avery Sts., for the Commonwealth Association, Inc., has been awarded to the HAYNES CONSTRUCTION CO. The estimated cost is $1,250,000.

✚The contract for the construction of the Home for Little Wanderers has been awarded to the WOODBURY & LEIGHTON CO., 185 Summer St.

✚Everett, Mass.—The contract for the construction of the school on Floyd St. has been awarded to WHITON & HAYNES, 200 Devonshire St., Boston.

✚Framingham, Mass.—The contract for the construction of the dormitory and refectory at the State Normal School has been awarded to J. J. PRINDIVILLE CO., South Framingham, Mass., at $71,500. Noted Oct. 1.

Long Island (Boston post office), **Mass.**—Bids will be received by the Infirmary Trustees for the erection of three buildings at Long Island. Thomas A. McQuade, 28 Court St., Boston, is Chn.

✚Lynn, Mass.—The contract for the construction of the school in the Blossom St. district has been awarded to KENNEDY & PETERSON, 7 Water St., Boston, at $130,540.

✚Mount Auburn, Mass.—The contract for the construction of the three-story school at Mount Auburn has been awarded to JOHN D. BYRNE & Co., Inc., 182 Sidney St. E. T. P. Graham, 20 Beacon St., is the Arch.

✚Pittsfield, Mass.—The contract for the construction of the school in the Dawes District has been awarded to FOOTE & JONES, 80 Bradford St. The estimated cost is $50,000. Arthur Vance is Chn. of the Com.

✚Worcester, Mass.—The contract for the construction of the building for the Worcester Boy's Club has been awarded to J. J. POWER, Worcester, at $80,000.

✚Worcester, Mass.—The contract for the construction of the four-story brick home for the Sisters of Mercy has been awarded to McDERMOTT BROS., at $50,000. E. P. Fitzgerald is the Arch.

Bridgeport, Conn.—Plans are being prepared by Skinner & Walker, Archs., 1188 Main St., for the city almshouse buildings to be erected near Palisade Ave. The estimated cost is $175,000.

Winstead, Conn.—Plans have been completed by Louis E. Jallade, Arch., 37 Liberty St., New York, for the construction of a three-story, 87x150-ft. Y. M. C. A. building on Main St.

✚Albany, N. Y.—Contracts for the additions to schools Nos. 16 and 18 have been awarded as follows: School No. 16, general contract, J. D. WALDBILLIG, at $44,564; school No. 18, PETER KEELER BUILDING CO., at $64,833. Noted Sept. 17.

★Buffalo, N. Y.—Bids will be received, until Oct. 30 (change of date from Oct. 23), by Col. Franklin W. Ward, Secy., State Bd. of Armory Commissioners, 14 State St., Albany, N. Y., for construction, heating, plumbing and electric work for armory and stable at Buffalo, for Troop "I," First Cavalry, N. G. N. Y. Noted Oct. 8.

Manhasset, N. Y.—The Board of Education contemplates erecting a two-story brick school at Manhasset, L. I. The estimated cost is $70,000. Frederick Briggs, Plandome, L. I., is the Arch.

New York, N. Y.—(Borough of Manhattan)—Plans have been completed by Gronenberg & Leuchtag, Archs., 303 Fifth Ave., for the six-story apartment to be erected at 111th St. and Seventh Ave. The estimated cost is $130,000.

✚The general contract for the construction of the 12-story apartment house at Seventh Ave. and 59th St., for Sol Bloom, has been awarded to the HEDDEN CONSTRUCTION CO., 1 Madison Ave., New York.

✚The masonry contract for the 12-story store and loft building at 35 West 35th St., for Raymond & Reisman, 507 West 113th St., has been awarded to the WILLIAM M. MOORE CONSTRUCTION CO., 516 West 139th St., New York. The estimated cost is $180,000.

Lorenz F. J. Weiher, Arch., 271 West 125th St., is preparing plans for the construction of an eight-story store and loft building, at 12 East 46th St., for the Ritz Realty Co.

✚Ossining, N. Y.—The general contract for alterations and an addition to the four-story theater and office building at Main St. and Croton Ave. has been awarded to the GRANNIS & WARLEY CONTRACTING CO., Depot Square. The estimated cost is $45,000.

Syracuse, N. Y.—The University Club will erect a clubhouse at Fayette Park. The estimated cost is $55,000.

Troy, N. Y.—Bids will be received, about Nov. 1, by William E. Clark, Arch., 506 Frear Bldg., for additions to the hospital at 14th St. and Fifth Ave. The estimated cost is $150,000.

Bloomfield, N. J.—Bids will be received, until Nov. 2, by the Board of Education, for constructing a high school at Bloomfield. William Whitney Rasmussen, 1133 Broadway, New York, is the Arch.

✚East Orange, N. J.—The general contract for alterations and additions to the one-story brick library at Main St. and Munn Ave. has been awarded to the ESSEX CONSTRUCTION CO., 85 Academy St. Noted Sept. 24.

Jersey City, N. J.—Preliminary plans are being prepared for the Lincoln High School to be constructed at Harrison and Crescent Ave. Estimated cost, $100,000. John T. Rowland, Jersey City, is the Arch.

✚Jersey City, N. J.—The contract for an addition to the Tuberculosis Hospital has been awarded to DENNIS MULLINS, INC., Montclair, N. J., at $114,900. Noted Sept. 3.

Newark, N. J.—Preliminary plans have been prepared by E. E. Guildbert, Arch., City Hall, for the three-story addition to McKinley School. The estimated cost is $130,000. R. D. Argue is Clk., Bd. of Education. The estimated cost is $130,000.

Ridgefield Park, N. J.—Fred J. Schwartz, Arch., Ellison St., Paterson, N. J., is preparing plans for a church and parochial school for St. Francis R. C. Church, Ridgefield Park. The estimated cost is $40,000.

Spring Lake, N. J.—Bids will be received, until Oct. 24, by Watson & Huckle, Archs., 1211 Walnut St., Philadelphia, Penn., for alterations and additions to Hotel Monmouth. The estimated cost is $70,000.

West New York (Weehawken post office), **N. J.**—The lowest bidder for the construction of the municipal building at 16th St. and Taylor Place was George T. Martin, 366 Fifth Ave., New York, at $76,400. Noted Oct. 8.

✚Allentown, Penn.—The general contract for the construction of the nurses' home at Allentown has been awarded to the OCHS CONSTRUCTION CO., at $72,473.

McKeesport, Penn.—Bids will be received, until Jan. 1, by W. T. Morton, Secy., Bd. of Education, for the construction of the high school. The estimated cost is $290,000.

✚Philadelphia, Penn.—The contract for the construction of the three-story building for the Carmelite Convent at Oak Lane has been awarded to MELODY & KEATING, Bailey Bldg.

✚The contract for the construction of the four-story brick building at Eighth St. and Snyder Ave., for Philip Rhinelander, has been awarded to STACEY REEVES & SON, 2011 Market St., Philadelphia, Penn., at $49,000.

Pittsburgh, Penn.—Bids will be received until 3 p.m., Nov. 3, by George W. Gerwig, Secy., Bd. of Education, Fulton Bldg., for the construction of the Schenley High School.

Bids will be received until Nov. 3 by George W. Gerwig, Secy., Bd. of Education, Fulton Bldg., for general repairs and alterations to the McNaughter School.

✚Pittston, Penn.—The contract for the construction of the two-story school at Pittston has been awarded to MILES J. FREY, at $150,000.

✚Radford, Va.—The contract for the construction of the Normal School of Virginia has been awarded to LONGEST & TESSIER, at $150,000.

✚Roanoke, Va.—The contract for the construction of the city hall and court house at Roanoke, has been awarded to the KING LUMBER CO., Charlottesville, Va., at $218,900. Noted Aug. 27.

✚Charlotte, N. C.—The contract for the construction of the library at Charlotte, has been awarded to J. A. JONES, Charlotte, at $41,000.

✚Hickory, N. C.—The general contract for the construction of the building for the First National Bank, has been awarded to J. A. JONES, Charlotte; architectural terra cotta, ATLANTIC TERRA COTTA CO.; concrete reinforcement, SOUTHERN ENGINERING CO.; c.i., ornamental iron and structural steel, MECKLENBERG IRON WORKS, all of Charlotte, N. C.

Citra, Fla.—Bids will be received until Nov. 9, by J. H. Brinson, Secy., Marion County Bd. of Pub. Instruction, Ocala, Fla., for the construction of the school at Citra. E. C. Hosford, Eastman, Ga., is the Arch.

✚West Palm Beach, Fla.—The lowest bid received for the construction of the three-story and basement court house was that of the King Lumber Co., Charlottesville, Va., at $174,000. Noted Sept. 17.

Iberville, La.—Bids will be received until Nov. 10, by J. J. Powell, Pres., Bd. of Control, Louisiana Leper Home, for buildings to be erected at the institution. Samuel Stone, 602 Liverpool, London & Globe Bldg., is the Arch.

✚New Orleans, La.—The contract for the construction of the County Club in Oakland Park has been awarded to GEORGE GLOVER, at $85,000.

Louisville, Ky.—Joseph & Joseph, Archs., 307 Commercial Bldg., are preparing plans for the construction of a theater and apartment house at Louisville. The estimated cost is $80,000.

✚Canton, Ohio—The general contract for the Y. M. C. A. building has been awarded to E. J. LANDOR, Canton, Ohio. The estimated cost is $150,000. Noted Aug. 27.

✚Cleveland, Ohio—Contracts for the construction of the Rawlings School were awarded by the Board of Education as follows: CLEVELAND FIREPROOF CONSTRUCTION CO., masonry, $97,012; JOHN MOORE, carpentry, $24,363; REPUBLIC STRUCTURAL IRON WORKS, iron and steel, $6690; SMALLWOOD PLASTERING CO., plastering, $7280; MANNEN & ESTERLY CO., sheet metal, $1450; and LEE H. GOULD & CO., roofing, $2439.

Bids will be received until Nov. 10 by the Board of Education for the construction of the three-story and basement Murray Hill School. Estimated cost, $200,000.

William C. Jansen, Arch., 403 O'Brien Bldg., is preparing plans for the construction of a two-story and basement school 85x126 ft. for the St. Cyril's and St. Methodius' Church. Estimated cost $40,000.

E. J. Schneider, Arch., 606 Cuyahoga Bldg., is preparing plans for the construction of a two-story and basement 120x132 ft., school, for the St. Stephen's R. C. Church. Estimated cost, $100,000.

Walker & Weeks, Archs., 802-1900 Euclid Bldg., are preparing plans for the construction of a 16-story and basement 129x190-ft. bank building for the Guardian Savings & Trust Co., Cleveland. Estimated cost, $1,000,000.

Plans are being prepared by Walker & Weeks, Archs., 802-Euclid Bldg., for the construction of a 12-story and basement 60x150-ft. bank building for the Union National Bank, Cleveland. Estimated cost, $500,000.

Columbus, Ohio—Bids will be received, until noon, Nov. 21, by B. F. Gayman, Secy., Agricultural Comn., of Ohio, State House, for constructing an addition to the Hyper-Immune building at the State Serum Farm, near Wagram, Ohio.

Hudson, Ohio—Bids will be received, until noon, Nov. 5, by John S. Walker, Clk. Bd. of Education, for constructing a school at Hudson. J. W. C. Corbusier, 309 Lennox Bldg., Cleveland, Ohio, is the Arch. Noted Oct. 8.

Delaware, Ohio—Plans are being prepared by O. N. Chamberlin, 1105 Schofield Bldg., Cleveland, for the construction of a four-story, 106x160-ft. building for the Hotel Donavin. Estimated cost $60,000.

Painesville, Ohio—Abram Garfield, Arch., 915 Garfield Bldg., Cleveland, is preparing plans for the construction of a one-story and basement gymnasium for Lake Erie College, Painesville. Estimated cost, $70,000.

Sandusky, Ohio—The Cedar Point Co. is having plans prepared for additional buildings to the White House Hotel. Estimated cost, $100,000.

✚South Newburg, Ohio—The contract for the construction of the jail for the village of South Newburg has been awarded to R. WOODLEY, Miles Ave., Cleveland.

Danville, Ind.—Plans are being prepared by Layton Allen, Arch., Indianapolis for the construction of a two-story and basement, 64x100 ft. Science Hall for the Central Normal College.

Terre Haute, Ind.—Bids will be received until 10 p.m., Nov. 5, for the construction of a three-story reinforced concrete normal school, by the Board of Trustees, State Normal School. Noted Aug. 6, Sept. 3 and Oct. 1.

Grand Rapids, Mich.—John F. Smith, Arch., 425 Houseman Bldg., is preparing plans for the construction of a one-story and basement, 58x146-ft. building, for the St. Anthony's R. C. Church. Estimated cost, $75,000.

✚Port Huron, Mich.—The contract for the construction of a two-story and basement, 38x208-ft. infirmary, has been awarded to AUGUST SCHULTZ, 803 Bancroft St., for the County of St. Clair. Estimate dcost, $65,000.

Chicago, Ill.—Plans are being prepared for the construction of an eight-story, 125x125-ft. office building, for the Methodist Book Co., at Rush and Superior St. Estimated cost, $250,000.

Peoria, Ill.—Bids will be received until 3 p.m., Oct. 28, by Anna Rynearson, Secy., School Dis., for the construction of a high school.

Appleton, Wis.—Plans will be prepared by the Lawrence College Trustees for the construction of a girls' dormitory. Estimated cost, $70,000.

Milwaukee, Wis.—Plans have been prepared by A. C. Clas, Arch., Milwaukee, for the construction of building on the Mariner Site, West Water and Sycamore St. The building will be 120x200 ft. and will cost $400,000.

Oshkosh, Wis.—William Waters and Henry Auler, Archs., are preparing plans for the addition and alterations to the Oshkosh High School. Estimated cost, $165,000.

✚Iowa City, Iowa—The contract for the construction of the woman's gymnasium at the University of Iowa has been awarded to T. N. STARK CO. Cedar Rapids. Estimated cost $61,490.

Muscatine, Iowa—Plans are being prepared by J. E. Mills & Son, Archs., Detroit, Mich., for the construction of a three-story armory and garage for the city. Estimated cost, $30,000. Contracts to be awarded about Nov. 20.

Sioux City, Iowa—Plans are completed for the construction of a freight depot for the Northwestern Ry. Co. Estimated cost, $140,000.

Minneapolis, Minn.—The plans for the erection of the biology building for the University of Minnesota, have been prepared by C. H. Johnston, Arch., and the contracts will be awarded about Nov. 1. Estimated cost, $200,000.

✚Concordia, Kan.—The contract for the construction of an eight-story building on Market and 22d St., has been awarded to WILLIAM STEELE & SONS CO., for Edward M. Harris. Estimated cost, $275,000.

✚Salina, Kan.—F. M. SPENCER & SON, Topeka, has been awarded the contract for the construction of a Union Station for the following railways: Union Pacific; Chicago, Rock Island & Pacific; Atchison, Topeka & Santa Fé; Missouri Pacific Ry. Estimated cost, $100,000.

✚St. Louis, Mo.—The contract for the construction of the Bryan Mullanphy School on Shaw and Tower Grove Ave. has been awarded to the MURCH BROS. CONSTRUCTION CO. Estimated cost, $229,000.

✚The contract for the construction of the four-story addition to the Missouri Baptist Sanitarium has been awarded to MURCH BROS. CONSTRUCTION CO. It will be 60x120 ft., reinforced concrete. Estimated cost, $150,000. Noted Sept. 24.

Plans are being prepared by F. C. Bonsack, Arch., for the construction of a three-story transfer station 162x200 ft., at Spruce and 12th St., for the Columbia Transfer Co.

Bartlesville, Okla.—Plans for the construction of a Y. M. C. A. building have been completed. Estimated cost, $65,000.

✚Seattle, Wash.—The contract for the construction of a ten-story reinforced concrete hotel has been awarded to DITLEFSEN & GERRING by the Rainier Heat & Power Co.

Spokane, Wash.—The Spokane & Eastern Trust Co. is preparing to remodel and improve the Traders Bldg. at Howard and Riverside St. Estimated cost, $60,000.

Colton, Calif.—Allison & Allison, Archs., 1405 Hibernian Bldg., Los Angeles, are preparing plans for the construction of a two-story and basement school. Estimated cost, $75,000.

Sacramento, Calif.—The Chamber of Commerce contemplates erecting an eight-story building. Estimated cost, $120,000.

Quebec, Que.—H. E. Prindle, Arch., Montreal, is preparing plans for the construction of the Union Station for the Canadian Pacific & Transcontinental Ry.

✚Victoria, B. C.—The contract for the construction of the city jail has been awarded to CHARLES W. CARKEEK. Estimated cost, $55,908. Noted June 4.

STATE HIGHWAYS, SACRAMENTO, CALIF.

Bids were received Sept. 21 by the State Highway Commission, for highway construction in various counties from (A) Occidental Construction Co., Los Angeles; (B) Palmer & McBryde, San Francisco; (C) Petersen & Grier, San Francisco; (D) Mahoney Bros., San Francisco; (E) W. J. Schmidt, Berkeley; (F) John A. Marshall, Berkeley; (G) P. L. Burr, San Francisco; (H) F. F. Prendergast, Los Angeles; (I) Bates, Borland & Ayer, Oakland; (J) Berry, Mackie & Co., San Francisco; (K) James H. Smith, San Francisco; (L) O'Brien Bros., Sausalito; (M) F. Rolandi, San Francisco; (N) R. H. McCray Co., Los Angeles; (O) J. W. Calback, San Diego; (P) Lynn S. Atkinson, Los Angeles; (Q) A. W. Gorrill, San Francisco; (R) P. H. Hoare, Oakland; (S) E. T. Johnson, Portland, Ore.; (T) Moffett & Mead, San Francisco; (U) Toohey & Johnson, Phoenix, Ariz. The item bids were as follows:

SISKIYOU COUNTY

	B	M	S	T	U
97,000 cu.yd. excavation	$0.65	$0.61	$0.61	$1.10	$0.47
2508 lin.ft. 12-in. corrugated iron pipe	0.75	0.60	0.50	0.75	0.50
436 lin.ft. 18-in. corrugated iron pipe	1.00	0.80	0.75	1.00	0.60
248 lin.ft. 24-in. corrugated iron pipe	1.25	1.10	1.00	1.50	0.80
702 cu.yd. Class B concrete for culverts and monuments	20.00	12.00	12.00	17.00	23.60
275 cu.yd. dry rubble concrete wall	3.00	4.00	2.00	3.00	4.00
3000 lin.ft. guard rail	0.30	0.50	0.40	0.45	0.60
352 monuments	1.00	1.00	1.25	1.50	1.00
Extended totals	$81,794	$72,672	$71,613	$124,026	$67,123

SANTA BARBARA COUNTY

	N	O	P
40,000 cu.yd. ordinary excavation	$0.40	$0.38	$0.75
13,700 cu.yd. loose rock excavation	0.78	0.62	0.75
4400 cu.yd. solid rock excavation	1.00	1.10	0.75
858 lin.ft. 12-in. corrugated iron pipe	0.75	0.60	1.25
267 lin.ft. 18-in. corrugated iron pipe	1.00	0.70	1.25
490 lin.ft. 24-in. corrugated iron pipe	1.00	0.80	1.25
34 lin.ft. 36-in. corrugated iron pipe	1.25	1.00	1.25
515 cu.yd. Class B concrete for culverts and monuments	11.50	8.00	12.00
4800 cu.yd. Class B concrete for pavements	4.50	3.65	4.50
275 cu.yd. dry rubble retaining wall	3.50	2.80	7.00
400 cu.yd. rubble masonry retaining wall	4.00	3.50	7.00
11,880 lin.ft. guard rail	0.30	0.45	0.70
176 monuments	1.00	0.60	1.00
Extended totals	$72,294	$58,923	$86,633

SANTA CLARA COUNTY

	A	B	C	D	E	F	G	H	I	J
98,000 cu.yd. excavation	$0.75	$0.78	$0.60	$0.68	$0.69	$0.52	$0.68	$0.75	$0.83	$0.70
1270 lin.ft. 12-in. corrugated iron pipe	0.40	0.40	0.50	0.75	0.50	0.30	0.60	0.50	0.50	0.50
700 lin.ft. 18-in. corrugated iron pipe	0.60	0.50	0.75	1.00	0.70	0.50	0.75	0.60	0.75	0.70
250 lin.ft. 24-in. corrugated iron pipe	0.80	0.60	1.00	1.50	1.00	0.60	0.90	0.80	1.00	1.00
60 lin.ft. 30-in. corrugated iron pipe	1.00	0.75	1.25	1.50	1.50	1.00	1.20	1.00	1.50	1.50
850 cu.yd. Class B concrete	15.00	20.00	15.00	15.00	11.00	16.00	13.50	16.00	10.00	12.00
19,000 lin.ft. guard rail	0.40	0.30	0.40	0.40	0.40	0.35	0.40	0.33	0.35	0.25
475 monuments	1.00	1.00	1.00	1.00	2.50	1.00	1.75	1.00	3.00	1.00
Extended totals	$95,513	$100,668	$81,110	$89,582	$87,222	$72,626	$88,130	$95,160	$99,150	$85,490

CONTRA COSTA COUNTY

	B	D	G	I	J	K	L	M
70,000 cu.yd. excavation	$0.60	$0.60	$0.46	$0.40	$0.60	$0.52	$0.495	$0.75
440 lin.ft. 12-in. corrugated iron pipe	0.40	0.75	0.50	0.50	0.50	0.55	0.62	0.60
70 lin.ft. 15-in. corrugated iron pipe	0.50	1.00	0.60	0.60	0.70	0.70	0.62	0.65
260 lin.ft. 18-in. corrugated iron pipe	0.60	1.00	0.75	0.75	0.70	0.80	0.80	0.75
200 lin.ft. 24-in. corugated iron pipe	0.70	1.50	0.90	1.00	1.00	1.10	1.00	1.00
640 lin.ft. 30-in. corrugated iron pipe	0.80	1.50	1.10	1.50	1.00	1.25	1.20	1.50
630 cu.yd. Class B concrete	20.00	15.00	13.00	10.00	12.00	11.50	13.00	10.00
16,000 lin.ft. guard rail	0.30	0.35	0.40	0.30	0.25	0.40	0.35	0.50
460 monuments	1.00	1.00	1.50	3.00	1.00	1.00	0.90	1.00
Extended totals	$60,879	$59,430	$48,821	$42,079	$55,311	$52,024	$50,346	$68,924

ENLARGING POND, ATLANTIC CITY, N. J.

✚Bids were received Oct. 1 by the Board of Commissioners for enlarging lower Doughty Pond from (A) EDWARD L. BADER CO., (awarded contract); (B) William H. Arthur Co.; (C) Charles T. Eastburn Co.; (D) Merrill-Ruckgaber Co.; (E) Fillebrown Taylor Co.; (F) Norton & Gorman; (G) Kelley McFeeley Co.; (H) F. J. Boas Co.; (I) Sutton & Corson; (J) Atlantic Construction & Supply Co. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J
30,000 cu.yd. embankment	$0.40	$0.52	$0.40	$0.55	$0.53	$0.60	$0.60	$0.58	$0.58	$0.71
24,100 sq.ft. steel sheet piling	0.80	0.85	0.90	0.90	0.875	1.00	0.83	0.90	0.90	0.89
20 cu.yd. cement grout	20.00	10.00	10.45	25.00	25.00	25.00	21.35	10.00	60.00	25.00
24,100 lin.ft. wood stripping	0.01	0.02	0.02	0.02	0.01	0.04	0.04	0.02	0.02	0.04
1577 cu.yd. concrete in spillway	9.00	7.63	8.79	7.50	9.40	6.00	8.76	10.00	9.99	13.00
1000 lb. reinforcing steel	0.05	0.05	0.18	0.05	0.07	0.05	0.06	0.05	0.135	0.04
59 expansion bolts	4.00	2.50	1.98	3.00	5.00	2.50	3.00	2.00	1.12	5.00
15 cu.yd. concrete in wood stave collar	30.00	11.00	12.00	15.00	12.00	15.00	11.37	10.00	26.77	15.00
2575 cu.yd. concrete in core wall	6.35	6.80	7.82	7.50	8.00	8.00	7.90	8.80	8.00	8.00
13 M. ft. b.m. lumber	0.05	0.045	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.035
Bridge from bank to intake (lump sum)	175.00	195.17	148.80	200.00	130.00	200.00	376.00	160.00	210.65	264.00
3800 lin.ft. piling spillway foundation	0.25	0.25	0.25	0.25	0.30	0.30	0.28	0.25	0.34	0.35
9 M ft. b.m. spillway foundation	0.04	0.05	0.04	0.05	0.055	0.04	0.04	0.04	0.05	0.045
36,000 sq.ft. concrete lining	0.13	0.12	0.14	0.13	0.15	0.15	0.15	0.14	0.20	0.14
New intake screen chamber (lump sum)	1000.00	1250.00	1219.92	1500.00	1500.00	2000.00	2552.00	2515.00	2683.64	1600.00
100 cu.yd. concrete not in plans	6.00	7.63	7.00	8.00	8.00	8.00	9.76	10.00	8.19	10.00
100 cu.yd. excavation not in plans	0.50	1.50	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.50
500 lb. steel rods not in plans	0.05	0.05	0.04	0.05	0.07	0.05	0.06	0.10	0.135	0.04
5 M. ft. b.m. not in plans	0.04	0.045	0.04	0.05	0.05	0.04	0.04	0.06	0.054	0.03
Extended totals	$71,891	$75,585	$78,518	$80,369	$84,067	$84,793	$85,537	$89,615	$91,342	$96,288

SEAWALL, WINTHROP, MASS.

✚Bids were received Sept. 23 for the construction of a seawall at the north end of the Winthrop Shore Reservation, from (A) George T. Rendle Co., East Boston; (B) McCarthy & Walsh, East Boston; (C) Hancock Engineering Co., Boston; (D) Coleman Bros., Boston; (E) Michael D. Russo, Boston; (F) Hugh Nawn Contracting Co., Roxbury; (G) Thomas Fitzgibbon, Beverley; (H) T. Stuart & Son Co., Newton; (I) John Cashman & Sons Co., Boston; (J) Boston Contracting Co., Charlestown; (K) W. H. Ellis & Son Co., East Boston; (L) Lawler Bros., Charlestown; (M) Leighton-Mitchell Co., Boston; (N) Rowe Contracting Co., Boston; (O) J. H. Ferguson, Dorchester; (P) CAPUTO & GIOVANNINI, Boston (awarded contract). The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
2000 cu.yd. earth excavation	$2.80	$2.25	$1.56	$2.00	$0.75	$0.75	$0.75	$1.10	$0.40	$0.50	$0.70	$0.75	$0.76	$0.50	$0.58	$0.60
9000 cu.yd. filling material	1.10	1.00	1.20	0.80	0.45	0.75	1.00	0.75	0.60	0.55	0.50	0.65	0.56	0.70	0.55	0.45
25 M. ft. b.m. lumber	100.00	75.00	87.60	45.00	65.00	60.00	58.00	50.00	65.00	50.00	55.00	80.00	60.00	55.00	60.00	40.00
1650 cu.yd. concrete masonry in walls	9.25	8.50	6.61	8.00	9.60	7.00	6.60	6.00	8.00	7.00	6.00	5.00	5.00	5.50	4.95	5.85
360 cu.yd. stone masonry	7.50	10.00	12.14	9.00	8.00	10.00	8.00	13.75	8.25	13.00	14.00	8.50	10.30	10.00	7.00	7.20
770 lin.ft. stone coping	5.50	5.75	5.43	6.00	7.20	7.00	4.00	3.85	5.10	5.00	5.50	5.50	5.50	3.00	5.20	4.10
Extended totals	$40,197	$37,427	$35,568	$33,385	$31,439	$30,240	$28,800	$28,014	$27,922	$27,280	$26,450	$24,895	$24,253	$23,660	$22,301	$21,651

RAPID TRANSIT SYSTEM, NEW YORK, N. Y.

Bids were received, Oct. 6, by the Public Service Commission for constructing Section 1, Route 43, and Section 1, Route 26 of the Lexington Ave.-Fourth Ave. rapid transit system from (A) Rapid Transit Subway Construction Co., 165 Broadway, New York; (B) Degnon Contracting Co., 30 East 42d St., New York; (C) T. A. Gillespie Co., 50 Church St., New York; (D) Smith, Hauser & MacIsaac, Inc., 18 East 41st St., New York; (E) Holbrook, Cabot & Rollins Corporation, 331 Madison Ave., New York. The item bids were as follows:

SECTION 1, ROUTE 43

	A	B	C	D	E
61,600 cu.yd. earth excavation above mean high water	$5.00	$6.00	$8.00	$8.00	$10.00
11,000 cu.yd. earth excavation for sewers	5.00	6.00	9.00	8.50	10.00
47,600 cu.yd. rock excavation	7.00	7.50	9.00	15.00	15.00
2000 cu.yd. rock excavation for sewers, etc	5.00	7.50	10.00	15.00	10.00
Underpinning of:					
12-story terminal building, S.E. cor. Park Ave. and 41st St. (lump sum)	10,000.00	25,000.00	30,000.00	10,000.00	...
4-story building, Nos. 118-120 E. 42d St. (lump sum)	5,000.00	3,500.00	10,000.00	5,000.00	...
For maintaining, protecting, etc., Park Ave. (lump sum)	10,000.00	1,500.00	5,000.00	15,000.00	...
3200 cu.yd. tunnel excavation S.B. local: Sta. 202+08 to sta. 204+25	20.00	15.00	22.00	25.00	15.00
Tunnel excavation S.B. local: Sta. 204+25 to 50 ft.	11.00	12.00	12.00	15.00	20.00
8500 cu.yd. north of E. 41st St.	20.00	15.00	22.00	30.00	20.00
Express tracks on Park Ave., from sta. 204+60 to sta. 207+16 including					
6750 cu.yd. cross passage and signal tower	20.00	15.00	22.00	30.00	20.00
6750 cu.yd. express tracks in Park Ave.: Sta. 207+16 to 210+15	13.00	12.00	15.00	15.00	25.00
900 cu.yd. N.B. local: From sta. 208+47 to sta. 209+53	30.00	15.00	30.00	35.00	30.00
1800 cu.yd. excavation for working shafts	12.00	15.00	10.00	20.00	30.00
29,100 cu.yd. concrete masonry	11.00	12.00	13.00	12.00	12.00
2300 cu.yd. protective concrete outside waterproofing	11.00	12.00	10.00	12.00	12.00
500 cu.yd. rubble stone masonry	8.00	7.50	8.00	10.00	8.00
100 cu.yd. dry rubble masonry	6.00	5.00	6.00	10.00	6.00
125 cu.yd. brick masonry	20.00	15.00	15.00	30.00	20.00
10 cu.yd. hollow terra cotta masonry	15.00	15.00	15.00	30.00	20.00
3000 bbl. portland cement grout	3.50	4.50	3.50	4.50	4.00
100 sq.yd. resurfacing concrete masonry	5.00	2.50	4.00	2.50	2.00
1000 lin.ft. timber piles	0.75	0.50	0.75	1.00	0.50
2 M. ft. b.m. timber foundations	100.00	50.00	75.00	50.00	50.00
100 cu.yd. broken stone and gravel	2.50	2.50	3.00	3.00	1.50
5400 sq.yd. 1-ply waterproofing	0.75	0.55	0.60	1.00	0.30
100 sq.yd. 2-ply waterproofing	1.00	1.00	0.75	1.25	0.45
7550 sq.yd. 3-ply waterproofing	1.25	1.25	1.00	2.50	0.75
100 sq.yd. 4-ply waterproofing	1.50	1.50	1.50	3.00	0.90
100 sq.yd. 5-ply waterproofing	2.00	1.75	2.00	3.50	1.15
1850 sq.yd. 6-ply waterproofing	2.25	2.00	2.50	4.00	1.35
100 sq.yd. dry-ply waterproofing	0.60	0.40	0.50	1.00	0.20
650 cu.yd. brick in asphalt mastic	35.00	25.00	30.00	40.00	25.00
100 lin.ft. 12-in. vitrified pipe	0.80	0.80	1.00	1.50	0.70
100 lin.ft. 10-in. vitrified pipe	0.70	0.60	0.80	1.25	0.65
3300 lin.ft. 8-in. vitrified pipe	0.60	0.40	0.75	1.00	0.55
100 lin.ft. 6-in. vitrified pipe	0.50	0.30	0.70	1.00	0.50
100 lin.ft. 4-in. vitrified pipe	0.40	0.20	0.60	0.80	0.45
100 lin.ft. 8-in. c.i. pipe	1.50	1.25	1.50	2.00	1.00
100 lin.ft. 6-in. c.i. pipe	1.10	1.00	1.00	1.75	0.70
125 lin.ft. 4-in. c.i. pipe	0.80	1.00	0.75	1.50	0.65
30 lin.ft. 10-in. c.i. pipe	2.00	1.50	2.50	3.00	1.25
50 lin.ft. 3-in. extra heavy c.i. pipe specials and fittings	1.00	1.00	0.80	1.25	1.00
50 lin.ft. 4-in. extra heavy c.i. pipe specials and fittings	1.25	1.00	1.00	1.50	1.25
15 lin.ft. 6-in. extra heavy c.i. pipe specials and fittings	1.75	1.25	1.75	1.75	1.50
150 lin.ft. 8-in. extra heavy c.i. pipe specials and fittings	2.00	1.50	2.50	2.25	2.00
12,800 duct.-ft. tunnel ducts	0.15	0.15	0.13	0.20	0.12
150,000 duct.-ft. railroad ducts	0.17	0.15	0.15	0.20	0.15
3800 ton riveted steel	95.00	90.00	80.00	85.00	75.00
30 ton removal of old steel	50.00	40.00	30.00	125.00	33.00
540 lin.ft. construction columns	20.00	25.00	40.00	125.00	5.00
1750 ton steel beams and shapes	72.00	80.00	60.00	75.00	70.00
400 drilling ⅞-in. holes in steel	2.00	0.50	1.00	0.60	2.00
80 ton steel rods and bars	100.00	60.00	60.00	100.00	80.00
1 ton miscellaneous iron castings	75.00	60.00	75.00	100.00	60.00
5 ton miscellaneous iron sewer furnishings	75.00	60.00	75.00	100.00	60.00
48,500 lb. special wire forms	0.10	0.15	0.10	0.20	0.15
100 lin.ft. 1¾-in. oak hand rail	0.60	0.50	0.50	1.00	0.40
860 sq.ft. steel gratings	1.50	1.50	1.50	2.00	2.00
1560 sq.ft. vault lights	1.50	1.50	1.50	2.00	2.00
1770 sq.yd. street surface restored (sidewalk)	2.75	2.00	2.50	5.00	2.00
1770 sq.yd. asphalt pavement restored	3.00	2.50	3.00	5.00	3.00
960 sq.yd. granite block pavement restored	4.00	3.50	3.50	5.00	2.10
1040 sq.yd. asphalt block pavement restored	3.50	3.50	3.50	5.00	3.00
100 lin.ft. new bluestone curb in place	1.50	1.50	1.50	2.50	1.00
100 lin.ft. new 8-in. granite curb in place	2.00	2.00	2.00	3.50	1.50
5400 lin.ft. ¾-in. w.i. electric conduit in place	0.25	0.30	0.25	0.25	0.15
400 lin.ft. 1½-in. w.i. electric conduit in place	0.40	0.40	0.40	0.50	0.20
300 lin.ft. 2-in. w.i. electric conduit in place	0.50	0.50	0.50	0.60	0.25
2500 lin.ft. 1-in. w.i. electric conduit in place	0.30	0.35	0.30	0.40	0.20
415 c.i. outlet boxes in place	1.00	1.00	1.00	2.00	0.70
25 c.i. pull boxes in place	5.00	5.00	1.50	5.00	1.00
150 lin.ft. 6-in. extra heavy c.i. pipe specials and fittings	2.00	1.50	1.50	2.50	1.50
60 lin.ft. 3-in. extra heavy c.i. pipe specials and fittings	1.00	1.00	0.80	2.00	1.25
100 lin.ft. 12-in. vitrified sewer pipe	5.00	4.00	3.00	3.00	2.40
100 lin.ft. 15-in. vitrified sewer pipe	6.00	4.50	3.50	4.00	2.85
100 lin.ft. 18-in. vitrified sewer pipe	7.00	5.00	4.00	4.50	3.35
100 lin.ft. 24-in. vitrified sewer pipe	8.00	5.50	5.50	5.00	4.70
190 ton c.i. sewer pipe, straight	50.00	80.00	50.00	60.00	40.00
95 ton c.i. sewer pipe, special	75.00	100.00	75.00	100.00	85.00
800 lin.ft. 3-ft. 9-in. circular sewer	10.00	12.00	10.00	35.00	4.00
100 lin.ft. 4-ft. circular sewer	12.00	14.00	12.00	40.00	5.00
80 lin.ft. 5-ft. circular sewer	14.00	16.00	15.00	50.00	7.50
100 lin.ft. 5-ft. 9-in. circular sewer	20.00	20.00	17.00	55.00	10.00
360 lin.ft. 6-ft. circular sewer	25.00	22.00	20.00	60.00	12.00
2 18-in. standard iron, bronze mounted, sluicegates in place	100.00	125.00	125.00	100.00	50.00
1700 lin.ft. support and care of electric railroad, single track	15.00	12.00	12.00	20.00	25.00
9 supporting elevated railroad columns entirely on structure	750.00	1,100.00	1,000.00	5,000.00	1,200.00
2 supporting elevated railroad columns partly on structure	1,000.00	1,100.00	1,000.00	5,000.00	1,000.00
Maintenance of present subway (lump sum)	60,000.00	90,000.00	50,000.00	75,000.00	250,000.00
2000 lin.ft. 6-in. water pipe in place	1.00	2.00	1.00	1.50	0.75
900 lin.ft. 12-in. water pipe in place	1.50	2.50	1.50	2.50	2.25
300 lin.ft. 20-in. water pipe in place	3.00	3.50	2.00	4.00	4.35
500 lin.ft. 30-in. water pipe in place	5.00	5.00	5.00	5.00	9.00
200 lin.ft. 48-in. water pipe in place	8.00	6.00	10.00	10.00	16.00
10 water service restored	20.00	35.00	10.00	25.00	50.00
1300 lin.ft. 4-in. c.i. gas pipe	0.75	1.00	0.50	1.00	0.65
3000 lin.ft. 6-in. c.i. gas pipe	1.00	1.00	0.75	1.25	1.15
1000 lin.ft. 8-in. c.i. gas pipe	1.25	1.25	1.00	1.50	1.25
1100 lin.ft. 12-in. c.i. gas pipe	1.50	1.50	1.50	2.00	2.75
100 lin.ft. 16-in. c.i. gas pipe	2.00	2.00	2.00	2.50	3.50
100 lin.ft. 20-in. c.i. gas pipe	2.50	3.00	2.50	3.50	4.35
400 lin.ft. bypassing above or below street surface, 6-in	3.00	4.00	2.00	5.00	4.00
800 lin.ft. bypassing above or below street surface, 8-in	4.50	4.50	3.00	6.00	6.00
100 lin.ft. bypassing 12-in. w.i. pipe on trestle	7.00	5.50	4.00	10.00	9.00
1600 lin.ft. bypassing 16-in. w.i. pipe on trestle	10.00	6.50	10.00	12.00	20.00

1600 lin.ft. bypassing 20-in. w.i. pipe on trestle	12.00	7.50	12.00	15.00	15.00
1600 lin.ft. trestle to support bypassing pipes	4.00	2.00	5.00	5.00	5.00
200 lin.ft. 6-in. w.i. gas pipe in place	1.50	1.00	3.00	2.00	3.00
1000 lin.ft. 8-in. w.i. gas pipe in place	1.75	1.25	4.00	2.50	4.00
100 lin.ft. 12-in. w.i. gas pipe in place	3.00	1.50	5.00	3.00	6.00
20 gas service restored	20.00	25.00	20.00	25.00	25.00
100 ton new c.i. hub and spigot water and gas pipe, straight	40.00	40.00	60.00	50.00	30.00
100 lin.ft. new standard weight w.i. gas pipe, 6-in	1.50	1.00	1.00	1.00	1.00
100 lin.ft. new standard weight w.i. gas pipe, 8-in	2.00	1.25	1.50	1.25	1.25
100 lin.ft. new standard weight w.i. gas pipe, 12-in	3.00	2.00	2.00	1.50	2.00
50 ton special c.i. hub and spigot castings	75.00	60.00	75.00	100.00	60.00
1000 lb. new malleable fittings for w.i. gas pipe	0.12	0.05	0.10	0.15	0.15
200 lin.ft. 8-in. high pressure fire system water pipe	3.00	2.00	1.00	5.00	1.95
100 lin.ft. 12-in. high pressure fire system water pipe	4.00	3.00	1.50	6.00	3.50
200 lin.ft. 16-in. high pressure fire system water pipe	5.00	4.00	2.00	8.00	6.35
10 ton new c.i. spigot and groove straight pipe	45.00	40.00	60.00	50.00	30.00
5 ton special c.i. spigot and groove castings	80.00	60.00	75.00	100.00	75.00
500 lin.ft. 6-in. air pipe in place	1.25	1.00	1.25	1.00	0.30
100 lin ft. new 6-in. air pipe in place	2.50	1.00	2.50	1.25	0.50
900 lin.ft. 8-in. mail tubes in place	3.00	5.00	3.00	3.00	10.00
100 lin.ft. new 8-in. mail tubes in place, straight	3.00	3.00	4.00	4.00	10.00
50 lin.ft. new 8-in. mail tubes in place, curved	5.00	8.00	6.00	10.00	25.00
5000 duct-ft. electric ducts and conduits in place	0.60	0.80	0.50	1.00	0.75
5000 lin.ft. 2½-in. w.i. duct pipes	0.60	0.80	0.59	0.75	0.60
15,000 lin.ft. 3-in w.i. duct pipes	0.65	0.80	0.60	0.80	0.70
200 lin.ft. 3½-in. w.i. duct pipes	0.70	0.80	0.99	0.90	0.75
400 lin.ft. 4-in. w.i. duct pipes	0.75	0.80	1.25	1.00	0.80
500 lin.ft. 2-in. Edison conduits	0.50	1.50	0.50	0.75	1.00
500 lin ft. 2½-in. Edison conduits	0.60	1.50	0.60	0.80	1.25
800 lin.ft. 3-in. Edison conduits	0.70	1.50	0.70	0.90	1.50
20 electric service restored	20.00	25.00	20.00	25.00	25.00
Extended totals	$2,368,867	$2,476,350	$2,720,276	$3,394,340	$3,606,330

Section 1—Route 26

	A	B	C	D	E
750 cu.yd. earth excavation	$5.00	$6.00	$10.00	$10.00	$10.00
125 cu.yd. rock excavation	10.00	7.50	10.00	20.00	15.00
34,050 cu.yd. tunnel excavation	12.00	10.00	11.00	12.00	13.00
15,100 cu.yd. concrete masonry	13.00	12.00	11.00	12.50	12.00
3810 cu.yd. protective concrete outside waterproofing	11.00	12.00	11.00	12.50	12.00
50 cu.yd. brick masonry	20.00	15.00	15.00	30.00	20.00
50 cu.yd. hollow terra cotta masonry	15.00	15.00	15.00	30.00	20.00
4400 bbl. portland cement grout	3.50	4.50	3.50	4.50	4.00
50 cu.yd. broken stone and gravel	2.50	2.50	3.00	3.00	1.50
720 sq.yd. 1-ply waterproofing	0.60	0.75	0.60	1.00	0.30
100 sq.yd. 2-ply waterproofing	0.75	1.00	0.75	1.25	0.45
300 sq.yd. 3-ply waterproofing	1.00	1.25	1.00	2.50	0.75
100 sq.yd. 4-ply waterproofing	1.25	1.50	1.50	3.00	0.90
100 sq.yd. 5-ply waterproofing	1.50	1.75	2.00	3.50	1.15
100 sq.yd. 6-ply waterproofing	1.75	2.00	2.50	4.00	1.35
100 sq.yd. dry ply waterproofing	0.50	0.40	0.50	1.00	0.20
100 sq.yd. 1-ply waterproofing (tunnel)	1.00	0.75	1.20	5.00	0.60
100 sq.yd. 2-ply waterproofing (tunnel)	1.50	1.00	1.50	5.00	0.90
100 sq.yd. 3-ply waterproofing (tunnel)	2.00	1.25	2.00	5.00	1.50
100 sq.yd. 4-ply waterproofing (tunnel)	2.50	1.50	3.00	5.00	1.75
100 sq.yd. 5-ply waterproofing (tunnel)	3.00	1.75	4.00	5.00	2.30
5000 sq.yd. 6-ply waterproofing (tunnel)	3.50	2.50	5.00	6.00	2.70
160 cu.yd. brick in asphalt mastic	40.00	30.00	30.00	35.00	25.00
50 lin.ft. 12-in. vitrified pipe	0.75	0.80	1.00	1.50	0.70
50 lin.ft. 10-in. vitrified pipe	0.65	0.60	0.80	1.25	0.65
50 lin.ft. 8-in. vitrified pipe	0.50	0.40	0.75	1.00	0.55
50 lin.ft. 6-in. vitrified pipe	0.40	0.30	0.70	1.00	0.50
50 lin.ft. 4-in. vitrified pipe	0.35	0.20	0.60	0.80	0.45
50 lin.ft. 6-in. c.i. pipe	1.50	1.00	1.00	1.75	0.70
200 lin.ft. 4-in. c.i. pipe	1.00	1.00	0.75	1.50	0.65
50 lin.ft. 3-in. extra heavy c.i. pipe specials and fittings	1.00	1.00	0.80	1.25	1.00
50 lin.ft. 4-in. extra heavy c.i. pipe specials and fittings	1.25	1.00	1.00	1.50	1.25
50 lin.ft. 6-in. extra heavy c.i. pipe specials and fittings	1.75	1.25	1.75	1.75	1.50
50 lin.ft. 8-in. extra heavy c.i. pipe specials and fittings	2.00	1.50	2.50	2.25	2.00
11,000 duct ft. tunnel ducts	0.25	0.15	0.13	0.20	0.12
190 ton riveted steel	80.00	90.00	80.00	100.00	75.00
120 ton steel beams and shapes	72.00	80.00	60.00	90.00	70.00
18 ton steel rods and bars	80.00	60.00	60.00	90.00	80.00
4 ton miscellaneous iron castings	75.00	60.00	75.00	100.00	60.00
800 lb. special wire forms	0.10	0.15	0.15	0.20	0.15
2080 lin.ft. 1½-in. oak hand rail	0.60	0.50	0.50	1.00	0.40
330 sq.ft. steel grating	1.50	1.50	1.50	2.00	2.00
90 sq.yd. street surface restored, sidewalk	2.75	2.00	2.50	5.00	2.00
100 lin.ft. new bluestone curb in place	1.50	1.50	1.50	2.50	1.00
100 lin.ft. new 8-in. granite curb in place	2.00	2.00	2.00	3.50	1.50
1500 lin.ft. ¾-in. w.i. electric conduits in place	0.25	0.30	0.25	0.25	0.15
275 lin.ft. 1¼-in. w.i. electric conduits in place	0.40	0.40	0.40	0.50	0.20
200 lin.ft. 2-in. w.i. electric conduits in place	0.50	0.50	0.50	0.60	0.25
2500 lin.ft. 1-in. w.i. electric conduits in place	0.30	0.35	0.30	0.40	0.20
110 c.i. outlet boxes in place	1.00	1.00	1.00	2.00	0.70
20 c.i. pull boxes in place	5.00	5.00	1.50	5.00	1.00
50 lin.ft. 6-in. extra heavy c.i. pipe specials and fittings	2.00	1.50	1.50	2.50	1.50
50 lin.ft. 3-in. extra heavy c.i. pipe specials and fittings	1.00	1.00	0.80	2.00	1.25
Extended totals	$728,445	$648,115	$670,512	$759,920	$747,022
Extended grand totals routes 43 and 26	$3,097,312	$3,124,465	$3,390,787	$4,154,260	$4,353,352

BRIDGE SUPERSTRUCTURE, MASSILLON, OHIO

Bids were received by the Commissioners of Stark County, Canton, Sept. 9, for the construction of the superstructure of the bridge across the Ohio Canal, Tuscarawas River, from (A) Fred Heisler, Massillon; (B) Hanneman Bros., Detroit, Mich.; (C) T. B. Husband, Cleveland; (D) Connolly-Cannon Co., Phillipsburg, N. J.; (E) Luke & O'Brien, Canton; (F) Cullen-Friestedt Co., Chicago, Ill.; (G) S. C. KISTNER & SON, Delaware, Ohio (awarded contract); (H) Thomas Sheahan, Hagerstown, Md.; (I) L. A. Mullins & Co., Cleveland; (J) E. J. Landor, Canton. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J
600 cu.yd. excavation	$3.00	$3.00	$1.00	$3.50	$2.00	$.372	$5.00	$3.25	$2.00	$7.50
155 cu.yd. concrete footers	6.00	8.00	7.00	7.00	7.50	7.20	9.00	9.00	6.50	9.25
64 cu.yd. concrete wall	6.00	7.00	8.00	10.00	6.00	9.85	7.00	8.00	7.50	12.50
1100 cu.yd. concrete trestle	13.00	11.35	12.00	18.00	12.00	16.10	9.75	14.90	11.50	13.00
210 cu.yd. concrete floors	10.00	12.00	14.00	25.00	11.00	17.35	11.25	12.00	13.00	15.00
2200 cu.yd. concrete finish	.75	.85	.60	2.25	.80	.67	.75	1.00	.50	.45
182,000 lb. reinforcing steel	.02625	.025	.03	.05	.0275	.045	.025	.03	0.35	.025
1020 lin.ft. setting pipe	.15	.25	.10	.50	.25	.25	.25	.25	30	.15
Extended totals	$26,094	$25,168	$25,219	$43,435	$25,276	$35,251	$24,385	$30,682	$25,843	$29,877

Decrease in Immigration—Figures of the Department of Labor show that since July 1, 1914, there has been a decided decrease in the influx of foreigners to this country. There were 34,637 entering in July, compared with 87,658 of the same month in 1913. In August there has been a further reduction of about 20,000, and September arrivals will probably be even less.

The New Haven Reduces Its Board—It is the intention of the New Haven R.R. to reduce the number of its board of directors from 27 to 17. Four men, William Rockefeller, George F. Baker, Charles F. Brooker and J. S. Elton, have already resigned from the board of directors. The reason for their resignations has not been disclosed.

RAPID TRANSIT SYSTEM, NEW YORK, N. Y.

Section 1, Route 48

Bids were received by the Public Service Commission, Oct. 9, for constructing Section 1, Route 48, of the Fourth Ave.-Lexington Ave. rapid transit system from, (A) FREDERICK L. CRANFORD, INC., 177 Montague St., Brooklyn, (awarded contract); (B) Degnon Contracting Co., 30 East 42d St., New York; (C) Smith, Hauser & MacIsaac, Inc., 18 East 41st St., New York; (D) Holbrook, Cabot & Rollins Corporation, 331 Madison Ave., New York; (E) Oscar Daniels Co., Woolworth Bldg., New York; (F) Underpinning & Foundation Co., 290 Broadway, New York; (G) Rapid Transit Subway Construction Co., 165 Broadway, New York. The item bids were as follows:

	A	B	C	D	E	F	G
54,400 cu.yd. earth excavation above mean high water	$6.35	$5.50	$6.00	$6.00	$6.00	$6.00	$6.
38,500 cu.yd. earth excavation below mean high water	6.35	6.50	7.50	7.00	8.00	10.00	13.
800 cu.yd. earth excavation for sewers above and below mean high water	6.35	5.50	7.00	6.00	6.00	10.00	6.
950 front ft. underpinning buildings on Park Place less than 7 stories	75.00	75.00	100.00	85.00	100.00	125.00	120.
225 front ft. underpinning buildings on Park Place 7 to 12 stories	150.00	100.00	125.00	100.00	200.00	125.00	200.
50 front ft. protecting buildings on Park Place, including labor and material	150.00	75.00	100.00	75.00	80.00	125.00	80.
Protecting U. S. Post Office building during construction (lump sum)	28,000.00	55,000.00	120,000.00	280,500.00	180,000.00	30,000.00	20,000.
Underpinning buildings No. 34 Park Row and No. 1 Beekman St. (lump sum)	4,320.00	6,000.00	6,500.00	30,950.00	6,000.00	17,000.00	14,000.
Underpinning buildings No. 145 Nassau St. and 38 Park Row (lump sum)	21,750.00	40,000.00	20,000.00	81,550.00	30,000.00	33,000.00	30,000.
Underpinning buildings Nos. 3 to 9 Beekman St. (lump sum)	12,625.00	25,000.00	20,000.00	56,250.00	25,000.00	30,000.00	25,000.
Underpinning buildings No. 140 Nassau St. and 14 Beekman St. (lump sum)	9,900.00	25,000.00	12,000.00	21,875.00	14,000.00	25,000.00	20,000.
Underpinning buildings No. 132 Nassau St. and 13 Beekman St. (lump sum)	4,340.00	12,500.00	10,000.00	8,750.00	12,000.00	15,000.00	15,000.
Underpinning buildings Nos. 16 to 32 Beekman St. (lump sum)	13,585.00	18,000.00	11,000.00	15,750.00	21,000.00	20,000.00	25,000.
Underpinning buildings Nos. 15 and 17 Beekman St. (lump sum)	7,500.00	15,000.00	2,500.00	15,625.00	10,000.00	15,000.00	15,000.
Underpinning buildings Nos. 19 to 29 Beekman St. (lump sum)	8,100.00	12,500.00	8,000.00	10,125.00	15,000.00	15,000.00	17,000.
11,200 cu.yd. tunnel excavation, including timbering and disposal of material	9.20	12.	16.00	11.00	9.00	18.75	15.
20,200 cu.yd. concrete masonry	8.80	10.00	10.25	9.00	11.00	12.00	12.
2750 cu.yd. protective concrete masonry outside waterproofing	8.80	10.00	10.25	7.00	12.00	11.50	10.
2100 cu.yd. rubble stone masonry	6.50	8.00	10.25	6.50	8.00	11.00	8.
50 cu.yd. dry rubble masonry	6.00	5.00	10.25	5.00	5.00	9.00	7.
25 cu.yd. brick masonry	20.00	15.00	25.00	15.00	20.00	30.00	20.
50 cu.yd. removal of concrete as required by Sect. No. 446	75.00	20.00	100.00	15.00	50.00	60.00	20.
10 cu.yd. hollow terra cotta brick masonry	15.00	15.00	25.00	15.00	15.00	30.00	15.
1000 bbl. grout of portland cement	3.00	4.00	3.50	2.00	2.00	4.00	3.
1000 lin.ft. timber piles	0.50	0.50	1.00	0.75	0.60	5.00	1.
2 M. ft. b.m. timber foundations	75.00	100.00	150.00	75.00	70.00	50.00	75.
100 cu.yd. broken stone or gravel	2.50	2.50	3.00	2.00	2.00	4.00	3.
17,500 sq.yd. waterproofing, 1-ply	0.50	75.00	0.60	0.30	0.50	0.50	0.
100 sq.yd. waterproofing, 2-ply	0.70	1.00	0.85	0.45	0.75	0.90	0.
5000 sq.yd. waterproofing, 3-ply	0.85	1.25	1.20	0.70	0.90	1.30	1.
100 sq.yd. waterproofing, 4-ply	1.00	1.50	1.30	0.90	1.20	1.70	1.
100 sq.yd. waterproofing, 5-ply	1.25	1.75	1.50	1.15	1.40	2.10	2.
250 sq.yd. waterproofing, 6-ply	1.50	2.00	1.75	1.35	1.60	2.50	2.
100 sq.yd. waterproofing, dry-ply	0.35	0.50	0.50	0.20	0.85	0.45	0.
2700 cu.yd. brick in asphalt mastic	25.00	25.00	30.00	25.00	30.00	25.00	30.
100 lin.ft. vitrified drain pipe, 12-in	1.00	0.80	1.00	0.70	1.00	1.25	1.
100 lin.ft. vitrified drain pipe, 10-in	0.80	0.60	0.80	0.65	0.90	1.00	0.
2000 lin.ft. vitrified drain pipe, 8-in	0.70	0.40	0.75	0.55	0.80	0.90	0.
100 lin.ft. vitrified drain pipe, 6-in	0.60	0.30	0.60	0.50	0.60	0.60	0.
100 lin.ft. vitrified drain pipe, 4-in	0.50	0.20	0.50	0.45	0.50	0.50	0.
100 lin.ft. c.i. drain pipe, 6-in	1.00	1.25	1.50	0.70	1.50	2.00	1.
1000 lin.ft. c.i. drain pipe, 4-in	0.75	1.00	0.80	0.65	0.80	1.75	0.
100 lin.ft. c.i. drain pipe, 10-in	1.50	1.50	2.50	1.25	2.00	3.00	2.
100 lin.ft. c.i. pipe and fittings, 3-in., extra heavy	1.00	1.00	1.00	1.00	1.00	1.50	0.
50 lin.ft. c.i. pipe and fittings, 4-in., extra heavy	1.25	1.25	1.50	1.25	1.50	1.75	1.
50 lin.ft. c.i. pipe and fittings, 6-in., extra heavy	1.50	1.50	2.00	1.50	2.00	2.00	1.
50 lin.ft. c.i. pipe and fittings, 8-in., extra heavy	1.75	1.75	2.50	2.00	2.50	2.50	1.
6800 duct ft. tunnel ducts	0.12	0.15	0.25	0.08	0.15	0.25	0.
78,500 duct ft. railroad ducts	0.15	0.15	0.14	0.10	0.15	0.25	0.
1100 ton riveted steel	72.00	75.00	75.00	67.50	74.00	70.00	90.
1675 ton steel beams and shapes	62.00	65.00	65.00	62.50	70.00	60.00	80.
195 ton steel rods and bars	75.00	55.00	60.00	62.50	70.00	80.00	75.
5 ton miscellaneous iron castings	75.00	80.00	100.00	100.00	70.00	100.00	65.
2 ton miscellaneous sewer irons	100.00	80.00	150.00	100.00	100.00	100.00	70.
500 lb. special wire forms	0.15	0.15	0.25	0.10	0.20	0.40	0.
100 lin.ft. 1¾-in. oak or ash hand rail	0.50	0.50	1.50	0.50	0.50	1.00	0.
2500 sq.ft. steel gratings for ventilation	1.50	2.00	1.50	1.50	1.50	1.60	1.
75 sq.ft. vault lights	1.50	2.00	1.50	2.00	1.50	1.60	1.
2250 sq.yd. sidewalk restored	2.50	2.00	2.00	2.25	2.00	2.70	3.
250 sq.yd. repavement of roadways—asphalt	3.00	2.50	3.00	2.25	3.00	5.00	3.
1050 sq.yd. repavement of roadways—granite block	2.00	3.50	3.00	2.25	2.00	4.00	4.
100 sq.yd. repavement of roadways—asphalt block	4.00	3.50	3.00	2.25	3.50	6.00	3.
60 lin.ft. new blue stone curb	1.25	2.00	2.00	1.00	1.50	2.50	1.
4050 sq.yd. repavement of roadways—wooden block	3.00	3.50	4.00	2.25	4.00	6.50	4.
50 lin.ft. new 8-in. granite curb	2.50	2.00	4.00	1.50	2.50	3.00	1.
4000 lin.ft. ¾-in. w.i. electric conduit	0.30	0.40	0.20	0.20	0.30	0.25	0.
300 lin.ft. 1½-in. w.i. electric conduit	0.40	0.50	0.40	0.40	0.40	0.40	0.
300 lin.ft. 2-in. w.i. electric conduit	0.50	0.60	0.55	0.50	0.50	0.50	0.
300 lin.ft. 1-in. w.i. electric conduit	0.40	0.45	0.30	0.30	0.40	0.30	0.
300 c.i. outlet boxes in station	1.25	1.00	1.00	1.00	1.00	1.50	1.
50 lin.ft. 6-in. c.i. pipe and fittings, extra heavy, in station	3.00	1.50	1.75	1.50	2.00	2.00	2.
50 lin.ft. 3-in. c.i. pipe and fittings, extra heavy, in station	2.00	1.00	1.50	1.25	1.00	1.50	1.
250 lin.ft. vitrified pipe sewers, 15-in	3.50	5.00	3.00	3.00	3.00	4.00	3.
850 lin.ft. vitrified pipe sewers, 18-in	4.00	6.00	3.50	3.50	4.00	5.00	4.
150 lin.ft. vitrified pipe sewers, 20-in	5.00	7.00	5.00	3.75	5.00	6.00	5.
50 lin.ft. vitrified pipe sewers, 24-in	6.00	8.00	7.00	5.00	6.00	7.00	5.
1 ton c.i. sewer pipe (straight)	40.00	80.00	60.00	40.00	50.00	60.00	50.
1 ton c.i. sewer pipe (special)	75.00	100.00	100.00	85.00	80.00	100.00	75.
50 lin.ft. egg-shaped masonry sewer, 3 ft. 6 in. x 2 ft. 4 in.	10.00	12.00	15.00	7.00	8.00	8.00	7.
170 lin.ft. egg-shaped masonry sewer, 4 ft. 0 in. x 2 ft. 8 in.	12.00	15.00	25.00	8.00	10.00	10.00	10.
100 lin.ft. Maintaining electric underground R.R. single track	15.00	10.00	30.00	20.00	10.00	12.00	15.
200 lin.ft. maintaining horse or other motor operated R.R. single track	2.00	7.00	15.00	5.00	10.00	10.00	10.
2 elevated railroad columns supported entirely upon the R.R. structure	1,000.00	1,500.00	2,500.00	1,200.00	1,150.00	2,500.00	1,000.
6 elevated railroad columns supported partly or entirely off the R.R. structure	800.00	1,500.00	2,500.00	1,200.00	1,000.00	2,500.00	1,200.
Supporting subsurface R.R. in Broadway (lump sum)	10,000.00	20,000.00	10,000.00	5,000.00	40,000.00	1.00	20,000.
Supporting subsurface R.R. in Park Row (lump sum)	36,000.00	40,000.00	35,000.00	25,000.00	50,000.00	15,000.00	30,000.
500 lin.ft. water pipe, 6-in	1.50	1.00	1.50	0.75	2.00	1.00	1.
500 lin.ft. water pipe, 12-in	2.50	1.25	2.00	2.25	2.50	2.00	2.
100 lin.ft. water pipe, 20-in	4.00	1.75	5.00	4.25	3.00	2.20	4.
100 lin.ft. water pipe, 24-in	6.00	2.00	8.00	5.00	4.00	3.00	6.

SECTION 1, ROUTE 48—(Continued)

25 service connections for water pipes, all sizes	20.00	25.00	20.00	25.00	20.00	25.00	20.00
600 lin.ft. c.i. gas pipe, 4-in	1.00	1.00	1.00	0.65	1.00	0.80	0.75
1000 lin.ft. c.i. gas pipe, 6-in	1.00	1.00	1.50	1.15	1.50	1.00	1.00
200 lin.ft. c.i. gas pipe, 8-in	1.50	1.25	1.75	1.25	2.00	1.20	1.25
100 lin.ft. c.i. gas pipe, 16-in	3.00	1.75	4.00	3.50	3.00	2.00	3.00
2800 lin.ft. w.i. bypassing pipe, 6-in	2.50	5.00	4.50	1.70	2.50	4.00	4.00
100 lin.ft. w.i. bypassing pipe, 8-in	2.50	5.50	5.00	3.00	3.50	5.00	5.00
50 lin.ft. w.i. bypassing pipe, 12-in	3.50	6.00	8.00	4.00	5.00	6.00	9.00
100 lin.ft. w.i. bypassing pipe on trestle, 12-in	3.50	6.00	8.00	4.50	5.00	6.00	10.00
100 lin.ft. w.i. bypassing pipe on trestle, 8 in	2.50	5.50	5.00	3.50	3.00	5.00	6.00
100 lin.ft. trestle to support bypassing pipes	3.00	2.00	8.00	3.00	3.00	3.00	4.00
25 service connection, for gas pipes all sizes	20.00	25.00	20.00	15.00	20.00	25.00	20.00
10 ton c.i. hub and spigot pipe (straight)	40.00	40.00	65.00	35.00	40.00	60.00	45.00
5 ton c.i. hub and spigot pipe (special)	80.00	60.00	100.00	70.00	80.00	100.00	75.00
100 lin.ft. 8-in. high-pressure fire system water pipe	2.00	2.00	3.00	2.00	2.00	8.00	3.00
100 lin.ft. 12-in. high-pressure fire system water pipe	3.00	3.00	6.00	3.50	3.00	10.00	5.00
450 lin.ft. 16-in. high-pressure fire system water pipe	3.00	4.00	8.00	6.35	4.50	12.00	6.00
8 ton c.i. spigot and groove high-pressure pipe (straight)	50.00	40.00	65.00	35.00	50.00	60.00	45.00
6 ton c.i. spigot and groove high-pressure pipe (special)	80.00	60.00	100.00	75.00	80.00	100.00	80.00
100 lin.ft. steam pipe, 6-in	8.00	7.50	15.00	10.00	4.00	30.00	6.00
100 lin.ft. steam pipe, 4-in	7.00	5.00	15.00	7.00	3.00	30.00	5.00
100 lin.ft. steam pipe, 8-in	15.00	10.00	20.00	12.00	5.00	32.00	8.00
15 service connections for steam pipes	70.00	50.00	75.00	100.00	25.00	60.00	200.00
100 lin.ft. new steam pipe, 6-in	7.00	2.50	1.50	6.00	4.00	2.00	7.00
100 lin.ft. new steam pipe, 8-in	9.00	3.00	2.00	8.00	5.00	3.00	8.50
100 lin.ft. new steam pipe, 4 in	6.00	2.00	2.00	4.00	4.00	1.50	4.50
200 lin.ft. air pipe in connection with mail tube, 2 in	1.75	1.00	1.00	1.00	2.00	0.50	1.00
100 lin.ft. new air pipe connection with mail tube, 2-in	1.75	1.00	1.00	0.50	2.00	1.00	1.50
1000 lin.ft. mail tube, 8 in	5.00	2.50	3.00	5.00	4.00	5.00	3.00
200 lin.ft. new mail tube (straight) 8 in	5.00	3.00	4.00	5.00	4.00	5.00	3.00
100 lin.ft. new mail tube (curved), 8-in	6.00	5.00	6.00	8.00	8.00	10.00	6.00
100 lin.ft. Western Union tube, 1¾ in	2.50	1.00	2.00	1.50	0.50	1.00	1.00
100 lin.ft. new Western Union tube, 1¾ in	2.00	1.00	2.00	1.50	0.50	1.00	1.50
100 duct ft. electric ducts and conduits (Sec. 62)	1.50	0.60	1.00	1.00	0.50	1.00	0.60
5000 lin.ft. w.i. pipe electric ducts and conduits, 2½ in. (Sec. 62)	0.50	0.60	0.50	0.75	0.50	0.60	0.60
7000 lin.ft. w.i. pipe electric ducts and conduit, 3 in. (Sec. 62)	0.50	0.60	0.60	1.00	0.50	0.70	0.65
700 lin.ft. Edison conduit, 2-in. (Sec. 62)	1.00	0.75	0.50	1.00	0.50	2.00	0.50
600 lin.ft. Edison conduit, 3 in. (Sec. 62)	1.25	0.75	0.60	1.50	0.50	2.50	0.70
600 lin.ft. w.i. pipe, 2 in. (Sec. 62)	1.00	0.75	0.50	0.40	0.50	2.00	0.50
50 electric ducts service connection, all sizes	25.00	50.00	20.00	25.00	30.00	25.00	20.00
Extended totals	$1,571,363	$1,714,200	$1,886,467	$1,967,471	$1,975,732	$2,049,398	$2,250,175

SEWERS, FAIRPORT, N. Y.

✚Bids were received Sept. 30 by the city for sewer construction from (A) JAMES F. LEARY CONSTRUCTION CO., INC., Rochester (awarded contract); (B) A. J. Shaw, Jr., Batavia; (C) Bishop Construction Co., Rochester; (D) Goggin & Schultz, Fredonia; (E) Samuel Bonn, Syracuse. The item bids were as follows:

Section 1, Storm Sewers

	A	B	C	D	E
60 lin.ft. 33-in. concrete sewer 6 ft. deep	$2.08	$2.45	$2.48	$3.00	$2.50
428 lin.ft. 33-in. concrete sewer 6 to 8 ft. deep	2.14	2.65	2.67	3.50	2.70
210 lin.ft. 33-in. concrete sewer, 8 to 10 ft. deep	2.28	2.90	2.95	3.75	3.90
305 lin.ft. 30-in. concrete sewer, 6 ft. deep	2.00	2.20	2.23	3.75	2.40
356 lin.ft. 22-in. vitrified pipe sewer, 6 ft. deep	1.70	1.35	1.35	1.75	1.65
326 lin.ft. 22-in. vitrified pipe sewer, 6 ft. deep	1.42	1.10	1.13	1.55	1.60
77 lin.ft. 12-in. vitrified pipe sewer, 6 ft. deep	0.92	0.75	0.75	0.85	1.35
170 lin.ft. 10-in. vitrified pipe sewer, 6 ft. deep	0.70	0.65	0.70	0.75	1.20
23 lin.ft. standard brick manholes	6.00	5.25	5.25	3.50	7.50
28 lin.ft. standard concrete manholes	7.00	5.75	5.50	5.00	6.50
13 catch basins	0.00	25.00	27.00	15.00	30.00
15 cu.yd. concrete, Class A	7.00	11.00	11.00	8.00	15.00
50 cu.yd. concrete, Class B	6.00	5.50	5.50	7.00	8.00
700 lb. reinforcing steel	0.03	0.05	0.05	0.04	0.05
Branches and slants	4.25	1.00	1.00	0.50	1.50
10 cu.yd. rock excavation	3.00	3.00	2.00	4.00	6.00

Section 2, Sanitary Sewers

80 lin.ft. 10-in. vitrified pipe sewer, 10 to 12 ft. deep	$1.08	$1.25	$1.39	$1.75	$1.50
291 lin.ft. 10-in. vitrified pipe sewer, 12 to 14 ft. deep	1.18	1.45	1.66	2.00	1.80
215 lin.ft. 10-in. vitrified pipe sewer, 14 to 16 ft. deep	1.38	1.75	1.83	2.25	1.90
215 lin.ft. 10-in. vitrified pipe sewer, 16 to 18 ft. deep	1.50	2.20	2.25	2.50	2.10
225 lin.ft. 10-in. vitrified pipe sewer, 18 to 20 ft. deep	1.62	2.40	2.55	2.95	2.35
295 lin.ft. 10-in. vitrified pipe sewer, 20 to 22 ft. deep	1.85	2.75	3.25	3.35	2.50
540 lin.ft. 8-in. vitrified pipe sewer, 6 ft. deep	0.58	0.55	0.59	0.50	0.80
4453 lin.ft. 8-in. vitrified pipe sewer, 6 to 8 ft. deep	0.66	0.65	0.69	0.75	0.90
1204 lin.ft. 8-in. vitrified pipe sewer, 8 to 10 ft. deep	0.70	0.80	0.90	1.00	1.15
470 lin.ft. 8-in. vitrified pipe sewer, 10 to 12 ft. deep	0.86	1.10	1.19	1.25	1.25
162 lin.ft. 8-in. vitrified pipe sewer, 12 to 14 ft. deep	0.94	1.36	1.52	1.55	1.40
2550 lin.ft. 6-in. vitrified pipe sewer, 6 ft. deep	0.30	0.38	0.51	0.35	0.52
50 lin.ft. 6-in. vitrified pipe sewer, 6 to 8 ft. deep	0.63	0.60	0.75	0.35	0.75
85 lin.ft. 6-in. vitrified pipe sewer, 8 to 10 ft. deep	0.68	0.70	0.95	0.75	1.10
140 lin.ft. standard brick manholes	6.00	5.25	5.25	3.50	9.00
140 lin.ft. standard concrete manholes	7.00	5.25	5.50	5.00	8.50
37 cu.yd. concrete, Class A	7.00	11.00	11.00	10.00	20.00
70 cu.yd. concrete, Class B	6.00	5.50	5.50	9.00	8.00
12 branches on 6-in. sewer	0.27	0.50	0.75	0.25	0.45
186 branches on 8-in. sewer	0.40	0.55	0.80	0.50	0.60
14 branches on 10-in. sewer	0.54	0.70	1.00	0.60	0.75
50 cu.yd. rock excavation	3.00	3.00	2.00	4.00	6.00
2 M. ft. b.m. lumber left in place	40.00	40.00	30.00	40.00	32.00
5 extra manholes heads	10.00	3.50	8.50	8.00	15.00

Section 3, Intercepting Sewers

42 lin.ft. 10-in. vitrified pipe sewer, 6 ft. deep	$0.70	$..65	$0.70	$0.65	$0.75
57 lin.ft. 10-in. vitrified pipe sewer, 6 to 8 ft. deep	0.82	0.80	0.91	0.75	0.80
282 lin.ft. 10-in. vitrified pipe sewer, 8 to 10 ft. deep	0.85	1.05	1.09	0.85	1.00
420 lin.ft. 10-in. vitrified pipe sewer, 10 to 12 ft. deep	1.08	1.20	1.30	1.00	1.50
40 lin.ft. 10-in. vitrified pipe sewer, 12 to 14 ft. deep	1.18	1.55	1.55	1.20	1.80
580 lin.ft. 8-in. vitrified pipe sewer, 6 ft. deep	0.58	0.50	0.55	0.50	0.50
179 lin.ft. 8-in. vitrified pipe sewer, 6 to 8 ft. deep	0.66	0.70	0.77	0.75	0.60
11 lin.ft. 8-in. vitrified pipe sewer, 8 to 10 ft. deep	0.70	0.85	1.03	1.00	1.00
24 lin.ft. 8-in. vitrified pipe sewer, 10 to 12 ft. deep	0.86	1.10	1.19	25	1.15
70 lin.ft. 8-in. vitrified pipe sewer, 12 to 14 ft. deep	0.94	1.40	1.52	1.50	1.25
36 lin.ft. 6-in. vitrified pipe sewer, 6 ft. deep	0.63	0.40	0.51	0.35	0.55
48 lin.ft. 10-in. c.i. pipe sewer, 8 ft. deep	2.50	1.20	1.25	1.50	1.75
24 lin.ft. 8-in. c.i. pipe sewer, 8 to 10 ft zdeep	2.57	1.60	1.66	2.00	2.50
24 lin.ft. 8-in. c.i. pipe sewer, 6 ft. deep	2.00	0.95	1.10	1.35	1.60
24 lin.ft. 8-in. c.i. pipe sewer, 6 to 8 ft. deep	2.08	1.15	1.18	1.50	2.00
65 lin.ft. 8-in. c.i. pipe sewer, 8 to 10 ft. deep	2.17	1.35	1.39	2.00	2.40
65 lin.ft. standard brick manholes	6.00	5.25	5.25	3.50	8.50
65 lin.ft. standard concrete manholes	7.00	5.25	5.50	5.00	7.50
39.4 cu.yd. concrete, Class A	7.00	11.00	11.00	10.00	20.00
20 cu.yd. concrete, Class B	6.00	5.00	5.50	9.00	8.00
11 branches on 8-in. sewer	0.40	0.55	0.80	0.50	0.60
3 branches on 10-in. sewer	0.50	0.70	1.00	0.60	0.75
150 cu.yd. rock excavation	3.00	3.00	2.00	4.00	6.00
2 M. ft. b.m. lumber left in place	40.00	40.00	30.00	40.00	32.00
20 cu.yd. quicksand excavation	5.00	3.00	2.00	4.00	6.00
2 extra manhole heads	10.00	3.50	8.50	8.00	15.00
365 lin.ft. 6-in. c.i. pipe in siphons	1.80	1.00	1.43	0.75	1.30
1000 lb. reinforcing steel	0.03	0.05	0.05	0.04	0.05
1240 lb. c.i. specials	0.04	0.05	0.06	0.03	0.08
Extended totals	$18,228	$19,236	$20,593	$21,827	$25,347

Whiting Foundry Equipment Co., Harvey, Ill. Catalog No. 111. Overhead tramrail equipment. Illustrated, 12 pp., 6x9 in.

B. K. Elliott Co., Pittsburgh, Penn. Catalog. Drawing materials and surveying instruments. Illustrated, 440 pages, 6x9 in.

Wern Stone Paving Co., Inc., 55 Liberty St., New York. Durax paving blocks. Illustrated, 40 pp., 7½x10 in.

Edward R. Bacon Co., 51-53 Minna St., San Francisco, Calif. Bulletin No. 10. Wallace concrete and lumber hoists. Illustrated, 8 pp., 6x9 in.

General Filtration Co., Inc., Cutler Building, Rochester, N. Y. Catalog. Filtros. Porous mineral ware. Illustrated, 28 pp., 5x7 in.

Sewage Treatment Plant, Akron, Ohio

Bids were received by the Director of Public Service, Aug. 11, for the construction of a sewage-treatment plant, according to plans prepared by R. Winthrop Platt, Cleveland, from (A) E. McSHAFFREY & SON, Akron (awarded contract); (B) J. Conelly & Son, Cleveland; (C) J. C. Devine, Alliance.

	A	B	C
5600 cu.yd. earth excavation	$1.75	$1.00	$1.00
2000 cu.yd. rolled embankment	.30	.40	.25
1500 cu.yd. top soil grading	.40	.80	1.00
1000 sq.ft. gravel walks	.05	.10	.10
2000 sq.yd. sodding	.20	.40	.30
2 acres seeding	150.00	60.00	56.00
Tending lawns (lump sum)	100.00	500.00	400.00
4800 sq.yd. macadam roadways	1.25	1.75	.75
Plain concrete work (lump sum)	64,604.00	71,000.00	60,000.00
Reinforced concrete work (lump sum)	75,000.00	92,000.00	11,000.00
Steel reinforcing (lump sum)	24,000.00	20,000.00	25,000.00
Brick work (lump sum)	2,250.00	1,200.00	1,500.00
Cut stone work (lump sum)	100.00	200.00	200.00
Structural steel and light iron work (lump sum)	1,450.00	1,500.00	1,200.00
Carpenter and mill work (lump sum)	1,050.00	1,300.00	1,000.00
Sheet metal work (lump sum)	450.00	300.00	200.00
Electrical work (lump sum)	1,050.00	1,000.00	800.00
Plumbing (lump sum)	4,500.00	5,000.00	4,000.00
C.-I. pipe work (lump sum)	34,000.00	26,000.00	30,000.00
Valves (lump sum)	10,500.00	11,000.00	10,000.00
Sluice gates (lump sum)	550.00	500.00	600.00
Special castings (lump sum)	2,900.00	3,500.00	5,000.00
Vitrified pipe work (lump sum)	43,000.00	44,000.00	42,000.00
Steel tanks an dapurtenances (lump sum)	800.00	1,100.00	1,200.00
Sludge press and appurtenances (lump sum)	4,800.00	5,000.00	5,000.00
Air compressor and appurtenances (lump sum)	1,500.00	1,600.00	1,800.00
Pumps and appurtenances (lump sum)	1,200.00	1,200.00	1,500.00
Miscellaneous steel, iron and wood work (lump sum)	2,500.00	3,000.00	3,000.00
Elevator and appurtenances (lump sum)	1,100.00	1,000.00	1,000.00
Industrial equipment (lump sum)	3,350.00	3,500.00	3,000.00
Filtering material (lump sum)	91,000.00	91,000.00	95,500.00
Sprinkling filter nozzles (lump sum)	3,100.00	3,200.00	3,000.00
Controlling apparatus (lump sum)	3,750.00	4,000.00	3,500.00
Outfall pipe (lump sum)	3,000.00	3,800.00	2,500.00
Main sewer extension (lump sum)	14,000.00	14,000.00	15,000.00
Removal of present buildings sum)	200.00	300.00	500.00
Fence (lump sum)	350.00	300.00	200.00
Additional plain concrete work (per cu.yd.)	10.00	10.00	9.00
Additional reinforced concrete work (per cu.yd.)	15.00	50.00	.....
Additional steel reinforcement (per lb.)	.03	.05	.04
Additional brick work (per M.)	30.00	25.00	25.00
Additional C.-I. pipe (per lb.)	.02	.04	.03
Additional W.-I. pipe (per lb.)	.06	.05	.....
Additional filtering material (sand) (per cu.yd.)	1.50	1.50	1.75
Additional filtering material (gravel) (per cu.yd.)	1.60	2.00	1.75
Additional filtering material (slag) (per cu.yd.)	1.40	1.25	1.50
Sheathing and shoring in place	50.00	50.00	50.00
Additional fencing (per lin.ft.)	1.00	.50	.50
Extended totals	$413,214	$435,125	$447,100

CANALS, NEW ORLEANS, LA.

Bids were received, Oct. 2, by the Sewerage and Water Board for Contract 68-D, constructing Broad St. Canal, and for Contract 69-D, constructing St. Bernard Ave. Canal, from (A) Kane Kelly Construction Co., (B) Victor Lambou, (C) A. L. Patterson, (D) Hampton Reynolds, (E) F. A. Noullet & Son, (F) Jefferson Construction Co., (G) John Reiss. The item bids were as follows:

CONTRACT 68-D

	A	B	C	D	E	F
60,000 cu.yd. excavation	$1.14	$1.10	$0.96	$0.75	$0.855	$1.10
125,000 cu.yd. overhaul	0.026	0.02	0.05	0.05	0.09	0.06
400 cu.yd. brickwork	7.55	8.25	7.50	8.25	10.37	11.00
5000 cu.yd. concrete 1.2.4 in place	7.34	7.50	7.00	8.20	6.28	7.25
9600 cu.yd. concrete 1.3.6 in place	6.53	6.03	6.00	7.50	5.75	6.95
11,000 sq.yd. surfacing	0.44	0.40	0.44	0.40	0.36	0.45
1,085,000 lb. steel reinforcing bars	0.0247	0.022	0.05	0.0235	0.0246	0.0225
80,000 lb. cast iron	0.0182	0.0175	0.02	0.015	0.023	0.02
273,000 lin.ft. round Y. P. piling, driven	0.34	0.20	0.18	0.25	0.32	0.25
17 M. ft. b.m. yellow pine lumber, placed in bridges, etc	45.00	75.00	45.00	30.00	36.30	50.00
20,000 ft. b.m. pecky cypress planking, in place	17.50	14.00	20.00	20.00	24.30	30.00
320 lin.ft. vitrified clap pipe, 24-in	1.78	1.25	1.00	1.23	1.57	1.65
380 lin.ft. vitrified clay pipe, 21-in	1.20	0.95	1.00	0.93	1.20	1.25
1000 lin.ft. vitrified clay pipe, 18-in	0.84	0.67	1.00	0.66	0.87	0.90
540 lin.ft. vitrified clay pipe, 15-in	0.55	0.42	0.68	0.46	0.58	0.75
100 lin.ft. vitrified clay pipe, 12-in	0.38	0.30	0.45	0.31	0.42	0.55
7300 lin.ft. vitrified clay pipe, 10-in	0.29	0.34	0.33	0.25	0.33	0.35
2300 lin.ft. vitrified clay pipe, 6-in	0.15	0.12	0.18	0.13	0.18	0.17
100 cu.yd. sand and cinders, in place	1.95	0.30	2.00	1.30	1.80	2.00
100 lin.ft. stone curbing, reset and relined	0.20	0.10	0.20	0.15	0.12	0.20
700 lin.ft. artificial stone curbing, in place	0.83	0.72	0.66	1.00	0.65	0.60
6000 ft. b.m. cypress curbing, in place	42.00	30.00	36.00	30.00	32.40	35.00
800 sq.yd. new shell pavement, laid	0.87	0.72	0.80	0.60	0.98	2.00
50 sq.yd. Belgian block pavement, taken up and relaid	0.65	0.96	2.70	1.00	1.60	1.00
50 sq.yd. bagging pavement, taken up and relaid	0.40	0.40	0.66	0.50	0.60	1.00
900 sq.yd. asphalt pavement, taken up and relaid	3.45	2.75	3.00	3.00	3.00	2.75
200 sq.yd. Schillinger pavement (sidewalks), taken up and relaid	0.98	2.05	1.20	1.00	0.95	1.15
100 sq.yd. brick pavement (sidewalks), taken up and relaid	0.33	0.30	0.66	0.30	0.40	0.60
2200 sq.yd. gravel pavement, taken up and relaid	0.20	0.20	0.66	0.50	0.42	0.80
150 sq.yd. granitoid pavement, taken up and relaid	3.77	2.50	3.00	3.50	3.00	3.00
1450 cu.yd. hard filling, in place	2.20	2.75	3.30	2.00	2.58	2.75
Extended totals	$315,077	$266,544	$286,737	$280,653	$289,039	$298,354

BARGE CANAL WORK, BRIDGE, SYRACUSE, N. Y.

Bids were received by Duncan W. Peck, State Supt. Pub. Wks., Capitol, Albany, Oct. 1, for constructing a bascule bridge over the Erie Canal at West Genesee St., Syracuse, N. Y., from (A) Walsh Construction Co., Davenport, Iowa; (B) Frank L. Cohen, Buffalo; (C) Lupfer & Remick, Buffalo; (D) Engineer's Estimate. The item bids were as follows:

	A	B	C	D
Coffer dams, pumping, bailing and draining (lump sum)	$2000.00	$2400.00	$1.00	$2000.00
2100 cu. yd. excavation	1.75	2.00	.75	2.00
400 cu. yd. second class concrete	7.00	7.50	8.50	7.50
700 cu. yd. reinforced concrete, Class A	10.50	12.00	14.00	12.00
53 cu. yd. reinforced concrete, Class B	20.00	20.00	23.00	20.00
630 sq. yd. approach pavements	3.00	3.00	3.00	3.00
2100 sq. ft. concrete sidewalks	.25	.12	.25	.25
10 sq. ft. vault lights	2.00	3.00	3.00	3.00
38,000 lb. metal reinforcement	.03	.02	.025	.03
270,000 lb. structural steel	.0434	.04	.039	.045
35,000 lb. machinery	.15	.14	.12	.14
14.5 M ft. b.m. lumber	60.00	50.00	55.00	65.00
140 lin. ft. lattice railing	1.75	2.00	2.00	2.00
2400 lb. metal duct	.12	.12	.10	.12
Track work on bridge approaches (lump sum)	200.00	100.00	220.00	200.00
Electrical equipment (lump sum)	3400.00	3100.00	4000.00	3400.00
Plumbing (lump sum)	500.00	500.00	590.00	500.00
Hardware, roofing and painting (lump sum)	500.00	500.00	590.00	500.00
Maintenance accessories (lump sum)	180.00	200.00	210.00	180.00
Maintaining navigation (lump sum)	500.00	50.00	25.00	500.00
Maintaining traffic for vehicles (lump sum)	500.00	100.00	100.00	500.00
Extended totals	$44,511	$43,335	$40,472	$46,485

MUNICIPAL BOND SALES FALL OFF

Sales of municipal bonds in September aggregated $4,880,000 according to the "Financial Chronicle." This does not include resales nor short-term financiering. It compares, however, most unfavorably with bond sales in recent years, as for example, with $24,974,000 in the same month last year. The issues for the first nine months of this year aggregate $381,000,000. This is the largest ever reported for the first nine months of the year, comparing, as it does, with $280,000,000 the first nine months of 1913. The following table, compiled by the "Financial Chronicle," shows the output of permanent municipal bonds issued for the month of September and for the nine months in this and previous years:

	Month of September	First Nine Months of the year
1914	$4,880,400	$381,028,960
1913	24,974,251	280,781,630
1912	25,469,643	317,912,921
1911	26,487,290	314,503,570
1910	18,364,021	231,021,042
1909	23,001,771	272,389,451
1908	34,531,814	243,241,117
1907	47,947,077	199,722,964
1906	8,980,418	153,152,345
1905	9,835,200	141,021,727
1904	10,694,671	197,921,657
1903	8,762,079	111,745,993
1902	9,179,654	117,678,855
1901	14,408,056	99,324,001
1900	4,033,899	97,194,441
1899	7,201,593	95,026,437
1898	6,173,665	83,150,559
1897	9,272,691	106,387,463
1896	3,693,457	56,229,416
1895	11,423,212	92,253,916
1894	8,249,347	90,454,836
1893	3,885,137	40,974,566
1892	6,242,952	63,583,834